CONSTRUCTION NEWS

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RAILWAYS.

ALABAMA.—Maury Nicholson, City Engr., Birmingham, advises us concerning grade crossings, that the subject of eliminating grade crossings has been under discussion in this city for the past several years, but nothing has come of it. Recently, however, the matter has been taken up by the railroad companies for a viaduct on 28th St. The same proposition may carry with it arrangements for a similar viaduct on First Ave. These two, if built, will eliminate a number of very dangerous crossings and will connect the north and south side of the city at a point where overhead crossings are now badly needed. If this effort succeeds in securing viaducts, it will probably be followed by others in the near future. General lines of agreement between the railroad companies and the city are the principal things now being discussed. At present, however, no definite agreement has been reached regarding location of these viaducts. It is probable that a general agreement will be reached between the city and the railroad companies as to the basis for building these and other viaducts.

The Decatur & Falls City Development Co. plans the construction of a railroad from Decatur, Ala., to Falls City, 80 miles. Chas. Basset, New Decatur, Ala., is Secy.

ALASKA SHORT LINE.—By a bill passed in the House of Representatives on May 25 an extension of one year was granted to the Alaska Short Line Ry. Co. to begin building its 360 miles of road across Southwest Alaska from Cook's Inlet to Anvik. With this provision the company has until June 1, 1911, to begin work.

BOISE & WESTERN.—Plans have been made for building this railroad in Oregon. Entering the state at Ontario, the Boise & Western R. R. will build in a northwesterly direction, through Malheur Canyon to a point directly east of Malheur Lake. From that point two surveys have been made for a continuation of the line. One of the projected lines passes to the north of Malheur Lake and the other between Malheur Lake and Harney Lake. The objective point of the road will be attained through the use of either line. Bend, Ore., probably will be the junction point for the new line with the Oregon Trunk Line. In connection with this project, the Oregon & Western Colonization Co. has been organized with capital of $12,000,000, and headquarters at Portland. John E. Burchard, of St. Paul, Minn., is Vice-Pres.

BRENHAM, BRAZOS VALLEY & GULF.—A. Ludwig, Engr., Sealy, Tex., advises us that it has not yet been decided when contracts will be let for building this railway from South Texas to Waco. Noted on April 7.

CHESAPEAKE & OHIO.—It is proposed to award contracts for the extension of the Guyan Valley branch from the mouth of Big Bluff, in Logan County, W. Va., through Wyoming, to connect with the Piney branch, in Raleigh County. This extension will connect the two greatest coal carrying branches of the Chesapeake & Ohio system and will open up one of the richest and most extensive coal and timber fields in the country. The route will be up Big Bluff Creek, by the town of Oceanna, on the Clear Fork, and thence to the Laurel Fork of Guyan River, a distance of 33 miles, to connect with the Piney extension. H. Pierce is Engr. Construction, Richmond, Va.

COLORADO SOUTHERN.—We are officially informed that bids for the construction of double track between Pueblo and Walsenburg, Colo., will not be taken before June 10 or 15. Noted fully last week. H. W. Cowan is Ch. Engr., Denver.

EASTERN KENTUCKY.—We are officially advised this company has no work under way or contemplated at this time. This refers to the following item which appeared in the issue of May 12: "An extension will be built, it is stated, from Webbville, Ky., to timber and coal lands in Breathitt County, 69 miles. Preliminary survey is under way." S. G. Bates is Vice-Pres. and Gen. Mgr., at Riverton, Ky.

GAINESVILLE, OKLAHOMA & WESTERN.—It is announced that preliminary survey has been made and that work has been started on the permanent location for a line from Gainesville, Tex., southwest ia Era, Slidell and Greenwood to Bridgeport, 56 miles. Contracts for the work probably will be let this month. J. Whaley is Pres.; F. B. Truax, Ch. Engr., Gainesville. Noted on April 7.

GILMORE & PITTSBURG.—The resolutions of the Board of Directors of the Gilmore & Pittsburg R. R. Co. have been filed with the Secretary of State, Helena, Mont., announcing the intention to extend the road from Armstead to Dillon and from Dillon to Butte and from Dillon to Whitehall in Montana. It is set forth in the resolutions that the cost of the two extensions will be $1,500,000. The resolutions were adopted on Dec. 27, 1909, and this is the first information given the public. Noted officially on May 5.

GULF, COLORADO & SANTA FE.—Contract has been given to J. T. SHORTALL, Kansas City, Mo., for grading work between Temple, Tex., and Lometa, comprising about 800,000 cu. yds. Noted on March 3.

HAWAII.—The Hilo R. R. Co. has perfected arrangements for extending its railroad from Hakalan to Paauilo in the district of Hamakua. Paauilo is the location of the Hamakua Mill. The company has been enabled to do this by means of an additional bond issue of $1,000,000, all of which has been purchased by T. W. Davies & Co., Ltd., and by the conclusion of 20-year contracts for all the freight both ways of the Laupahoehoe Sugar Co., the Kalwiki Sugar Co., Ltd., formerly the Ookala Sugar Co., the Kukaiau Mill Co. (Horner's,) and the Hamakua Mill Co. The amount of freight covered by these contracts will be about 50,000 tons a year in addition to outside freights in the same section. H. M. Von Holt is Vice-Pres., Honolulu.

The House of Representatives, Washington, D. C., on May 25 passed a bill ratifying an act of the Hawaiian Legislature authorizing W. A. Hall, of Honolulu, and his associates to construct and operate a railroad on the island of Hawaii.

INTERCOLONIAL RY.—Contract for the diversion of the Intercolonial Ry., near Chatham, N. B., with a view to eliminating the present heavy grade between Loggieville and Nelson, and giving better railway facilities at Chatham, has been let in part to MORRISON & CLARK, of Summerside, P. E. I. The whole work involves an expenditure of about $500,000 and the construction of about 8½ miles of railway. It is stated that the contract awarded to Morrison & Clark will cost about $200,000.

KANSAS, OKLAHOMA & PANAMA.—Granted a charter in Oklahoma on May 17, with capital stock of $1,000,000. Company will construct a line from Liberal, Kan., south to Sayre, in Beckham County, Okla., with a branch east from Sayre to Oklahoma City. Sayre will be the headquarters. Ohio and Indiana capitalists and business men of Sayre and other Western Oklahoma towns are backing the enterprise. Bonuses have been raised by a number of towns, among them Sayre, which will give $40,000. Richard W. Ruffin, of Hamilton, Ohio, is the principal promoter. Others among the directors are John W. Lytle and W. F. Crawford, of Indianapolis; D. B. Richardson, J. A. Whitehurst, G. L. Bennett; and D. W. Main, of Sayre, Okla.

McCRORY & BEEDEVILLE.—The McCrory Tramway & Transportation Co. has changed its name to the McCrory & Beedeville Southern Railroad Co.; capital, $100,000. Survey is made from McCrory to Beedeville, 14 miles. Right-of-way is obtained and construction will soon begin. Clayton Hailey is Pres.; R. B. Keating, Secy. and Treas., McCrory, Ark. Noted on April 21.

MEXICO.—The Chamber of Deputies, Mexico City, has approved the contract, entered into between the Secretary of Communications and Public Works and Lic. Francisco Alfaro, for the construction of a railroad from Puebla to Oaxaca. The principal object of this line is for the purpose of exploiting the coal mines in this district and is to be built by A. B. Adams, Inc. The act of the Chamber of Deputies in approving the contract reads as follows: "The contract entered into between Leandro Fernandez, representing the Department of Communications and Public Works, and Lic. Francisco Alfaro, representing A. B. Adams, Inc., for the construction of a railroad starting at Puebla and passing by the mines of coal at Tezcatlan and Tiaxiaco, Oaxaca, and ending at Lake Chacahua on the Pacific coast, is approved in all its parts."

NEW YORK CENTRAL & HUDSON RIVER.—Contracts will be let, it is stated, for double-tracking a section of about 21 miles between Lockport, N. Y., and Albion. It is expected to have the work finished this coming fall. The shops at East Buffalo are to be enlarged by adding another building. The cost of the shop improvements, including equipment, will be about $140,000. G. W. Kittredge is Ch. Engr., New York.

RANGELY LAKES & MEGANTIC.—Organized at Augusta, Me., to build a railroad 30 miles into the lumber region of northern Franklin and Oxford Counties. It will begin at Oquossic, at the upper end of the Rangely Lakes system, the present terminus of the Rumford Falls branch of the Maine Central, and extend to the Canadian border, by way of Rangely, Lower Cupsuptic, Davistown, Stetson, Massachusetts Gore and adjoining wild land. The capital stock is $100,000 and the shareholders, at the time of organization, are Lucius Tuttle, Boston; Charles S. Mellen, Samuel Memingway, New Haven; William Skinner, Holyoke, Mass.; Franklin A. Wilson, Bangor, Me.; Seth M. Carter, Auburn, Me.; Joseph Symonds, Portland, Me.; Edward P. Ricker, South Poland, Me.; Henry B. Cleaves and Morris McDonald, Portland. The charter was granted by the last Legislature, but the organization papers have been filed only this week. It is stated that construction will begin at once.

SAN DIEGO, EL PASO & ST. LOUIS.—Plans are under way for commencing construction at an early date. P. A. McCarthy & Sons, of Houston, Tex., the engineers, have surveyed, located and estimated the cost of building the line from El Paso to Quanah, Tex., where it will connect with the 'Frisco line to St. Louis. It is proposed to build the road west from El Paso to Yuma to connect with the San Diego Southern Ry., now partially completed from San Diego to Yuma; or to build from Bisbee to Yuma, connecting at Bisbee with the El Paso & Southwestern R. R. Estimates of the engineers place the cost of building the road from El Paso to Quanah at $10,110,000. The distance from El Paso to Artesia is 197 miles, and from Artesia to Quannah is 303 miles so the average cost of construction would be $20,200 per mile. Noted on Feb. 3.

TUCUMCARI, PORTALES & GULF.—We are officially advised that bids will be received by M. J. Healy, Pres. and Gen. Mgr., at Pyote, Tex., for construction work on the T., P. & G. R. R. Surveys have been made for 50 miles and right-of-way secured; $350,000 in cash has been secured for construction. The road is projected to extend from Tucumcari, N. Mex., traversing the counties of Quay and Roosevelt in New Mexico, and Bailey, Cochran, Yoakum, Caines, Andrews and Winkler, to Pyote, Tex., thence south to Del Rio, Tex. Agricultural land that is now used extensively for cattle purposes will be opened by the construction of this line. Noted on March 10.

WRIGHTSVILLE, ADRIAN & LYONS.—Chartered in Georgia to build a line 50 miles long, connecting Wrightsville, Adrian and Lyons, Ga. The incorporators are R. M. Garbutt and W. O. Donovan, of Toombs County; E. J. Sumner, J. E. Webb, C. B. Salter and R. L. Gilles, of Emanuel County. The railroad as projected will include two pile bridges, one of 1,000 ft. and the other 800 ft. long. The company is said to be ready to receive bids for construction. T. J. James, of Adrain, Ga., is Pres. W. F. Staten, of Adrian, is Secy.

PARAGUAY.—Cornelius Ferris, Jr., U. S. Consul, at Asuncion, Paraguay, states that the extension of the Paraguay Central Ry. from Pirapo to Encarnacion, on the Parana River, is progressing steadily. Ferryboat connection will be made with Posadas, on the Argentine side of the river, to which point the Argentine Northeastern Ry. is being extended. This will give Paraguay its first connection with the outside world by railroad, although the Paraguay Central is the oldest road in South America. Through service is expected between Asuncion and Buenos Aires by the end of 1910. For through-service the wider gage of the Paraguay line is to be changed to that of the Argentine Northeastern, and the old rolling stock entirely replaced by new equipment which has just arrived from England. It consists of 20 locomotives, one officers' car, 223 freight, two dining, three parlor, two compartment, two sleeping, and 12 day cars, eight baggage, mail, and express cars, one wrecking car, and one 20-ton, flat-bottom boat with steam winch. Of the $1,410,000 additional stock issued by the Paraguay Central Ry. $1,070,000 was taken by the Argentine Government, which also secured the old rolling stock for use on Patagonia railways. Argentina also appropriated $10,000,000 for the extension of the railway to the north. F. Fraser Lawton is Gen. Mgr. of the Ferrocairril Central del Paraguay at Asuncion.

ELECTRIC RAILWAYS.

BRIDGEPORT, CONN.—The Bridgeport & Danbury Electric Ry. Co. early this summer will begin the construction of an interurban trolley line for which it holds the franchise. The preliminary estimates indicate that the construction and equipment of the road, which will be a little over 20 miles long, will cost over $800,000. The line will run over much private right-of-way through the towns of Bridgeport, Trumbull, Monroe, Newton, Bethel and Danbury and will serve a population of about 135,000. The preliminary surveys are now being made. Morton F. Plant, of New London, Conn., is interested. Company was chartered in 1907. Capital stock, $1,500,000. The interests identified with the Bridgeport & Danbury Co. have recently acquired control of the Danbury & Bethel St. Ry. Co.

WHITE PLAINS, N. Y.—The Public Service Commission, Second District, granted on May 28 the application of the New York, Westchester & Boston Railway Co. for permission to abandon that part of its proposed route extending from Westchester Ave., in White Plains, to Elmsford, about three miles. The estimated cost of the Elmsford branch was about $3,000,000. The company decided to abandon the route because it did not think that there would be business enough to justify such a large expenditure.

WHITE PLAINS, N. Y.—The Westchester & Northern R. R. Co. has plans under consideration for letting construction contracts. The New York Public Service Commission has formally approved the plans and layout of the New York end of the line. As noted on Feb. 17, this company was incorporated in New York with $1,000,000 capital to operate a steam or electric railway from a connection with the New York, Westchester & Boston Ry. at White Plains, N. Y., to Danbury, Conn., 45 miles, of which 35 miles are to be in the state of New York, and ten miles in Connecticut. There is also to be a branch from Pound Ridge, Westchester County, to the line of the New York, New Haven & Hartford R. R. in Putnam County, 14 miles. Robert T. Bird, of Hartford, Conn.; L. S. Miller and W. A. Cokeley, New York; Allan Wardwell, Lawrence, N. Y.; R. P. Buell, Bayside, N. Y.; James L. Crider, Mount Vernon, N. Y.; John C. Gleason, New Rochelle, N. Y.; Charles L. Nagle, Bayonne, N. J., are the directors.

GROVE CITY, PA.—We are officially advised that the address of ALFRED DE MAYO & CO., who were awarded contract for construction of the Grove City & Slippery Rock Ry., is Ashtabula, Ohio. Noted fully on May 19.

HANOVER, PA.—JOHN H. DOBBLING, of York, Pa., has been awarded the contract to grade for the extension of the Hanover & McSherrystown St. Ry Co.'s line from McSherrystown to Conewago Chapel. The work will begin at once. From Conewago Chapel the proposed new road will branch, one line going to Gettysburg, the other to New Oxford. Robt. E. Manley is Gen. Mgr., Hanover.

BUCKHANNON, W. VA.—The Buckhannon & Clarksburg Electric Ry. Co. has plans under way for building its proposed 26-mile line from Buckhannon to Clarksburg via Hodgeville, Century, Peel Tree and other points. U. G. Young is Pres.; E. W. Martin, Vice-Pres.; W. H. Fisher, Treas.; G. O. Young, Secy.

GRIFFIN, GA.—We are officially advised that the Griffin City & Suburban Ry. Co. has not effected organization yet. Charter has been secured. As noted on March 24, this company will build an electric line from the city of Griffin to the State Agricultural Experiment Farm, a distance of five miles. It was also chartered to build interurban extensions. A. D. Akin is Ch. Engr., Macon, Ga.

BIRMINGHAM, ALA.—George Kelley and associates have been granted a franchise by the City Council to build an electric railway over certain streets in Birmingham.

DECATUR, IND.—The Fort Wayne & Springfield Ry. Co. may let contracts soon for building an extension 18 miles long. A. W. Fishbaugh is Ch. Engr., Decatur.

DETROIT, MICH.—A meeting of those interested in the Grosse Isle Railway Co. will be held soon to perfect the organization of the operating company, which will control the proposed new bridge and the electric line around the island. Articles will be filed in a few days. P. N. Jacobsen, 361 Cadillac Ave., Detroit, promoter of the enterprise, is now engaged in organizing the construction company.

GLASGOW, KY.—The Louisville, Lincoln Farm & Mammoth Cave Traction Co. plans to let contract about June 1 for building its proposed line from Glasgow to Hodgenville, Ky., via Mammoth Cave and Lincoln Farm, 60 miles. It is desired to let construction to a contracting company which will take some of the bonds and stock. J. M. Richardson is Pres.; Charles Van de Burgh is Gen. Mgr., both at Glasgow, Ky. Officially noted on Dec. 16, '09.

FOSTORIA, OHIO.—Charles A. Bliss, Toledo, representing the Toledo Promoting & Developing Co., is reported to be securing right-of-way for an electric line from Fostoria to Paulding. Right-of-way has been secured nearly to Bloomdale. The Bloomdale City Council has granted a franchise to the company.

JOLIET, ILL.—The Joliet & Southern Traction Co. plans extensions in Joliet and to Forest Park. L. D. Fisher is Ch. Engr., Joliet.

MOUNT CARMEL, ILL.—The Secretary of State, Springfield, Ill., has issued articles of incorporation to the Evansville, Mt. Carmel & Olney Interurban Co. for the construction of an interurban line from Mt. Carmel to Olney. The capital is $30,000. The incorporators are E. Q. Lockyear, C. J. Seibert and S. J. Lanbscher, of Evansville, Ind.; Thomas Marvel and E. B. Bixler, Cynthiana, Ind.; Aden Kuopf and J. F. Hyatt, Olney; James F. Seibert and J. O. Smith, Lancaster, and Lewis Seitz and Robert Parkinson, Mt. Carmel. Noted on Feb. 3.

IOWA CITY, IOWA.—The Iowa City, Ottumwa & Southwestern Ry. Co. has awarded contract to A. STEFFEN, Davenport, Iowa, to build its line. F. Tanner is Vice-Pres., Iowa City. The railway will extend from Ottumwa to Iowa City, 70 miles.

DES MOINES, IOWA.—M. H. Miller, Pres. of the Omaha, Council Bluffs & Sioux City R. R. Co., P. O. Box 974, Des Moines, advises us that construction contracts will be let when stock and right-of-way are secured. Fully noted on April 21.

VALENTINE, NEB.—C. H. Cornell, Valentine, is reported to be promoting an interurban railway to extend from Valentine to Spencer via Lincoln, Pierre and Sioux City, a distance of 130 miles. Power is to be obtained from the Niobrara River. Right-of-way has been partly secured and surveys have been completed.

ANACONDA, MONT.—John A. Connelly, Muskogee, Okla., has been granted a franchise by the Council to build a railway in Anaconda. The franchise stipulates that construction must begin within 30 days after the ordinance is accepted by the applicant, and at least four miles of track must be completed within 13 months.

JEFFERSON CITY, MO.—The North Missouri Central Ry. Co. has awarded contract to the M. A. TALBOTT CONSTRUCTION CO., 1110 American Bldg., Baltimore, Md., for building this line from Jefferson City, Mo., north to Columbia, 28 miles, thence northeast to Mexico, an additional 31 miles. The company also plans to put up a power-house, car barn, three terminals and two substations. O. F. Spaete, 1304 New National Bank of Commerce Bldg., St. Louis, Mo., is interested. Noted on May 19.

DALLAS, TEX.—The stockholders of the East Texas Traction Co. will hold another meeting June 2 in this city for the purpose of deciding upon the route of the proposed interurban electric railway that the company will build between Dallas and Terrell. The towns of Mesquite and Forney are prospective sites for the power-house. Noted on Dec. 9, '09.

MARSHFIELD, ORE.—The Coos Bay Rapid Transit Co., of North Bend, has been granted a franchise to build a railway over certain streets in Marshfield. A similar franchise has been granted the company in North Bend. As noted on May 12, "we are officially advised that the Coos Bay Rapid Transit Co. has awarded contract to the EMPIRE CONSTRUCTION CO., Marshfield, for building its line between Marshfield and North Bend, four miles. Surveys are made, capital obtained, and right-of-way secured." W. P. Evans is Pres., North Bend. L. W. Traver is Pur. Agent, Marshfield. Noted on April 7.

LIGHT AND POWER PLANTS.

(denotes that this work is advertised in Engineering News.)*

YORK HARBOR, ME.—The York Electric Light & Power Co., of Biddeford, has purchased the property of the Agamenticus Light & Power Co., of York Harbor, of Edward S. Marshall, owner, at $60,000. The York Co. controls the entire electric light and power systems between Biddeford and Dover. The company, it is reported, will immediately proceed to light all the shore resorts of Kennebunk, Wells, Ogunquit and York, and the thickly settled portions of these towns. The Selectmen have awarded a contract for lighting the town of York to E. S. MARSHALL, which has been taken over by the York Co., which will make extensions to the service.

FRANKLIN, N. H.—Plans are being prepared by the Franklin Needle Co. for the construction of an electric generating plant.

EAST TILTON, N. H.—We are officially advised that the STONE & WEBSTER ENGINEERING CORPORATION, 147 Milk St., Boston, has begun work on a contract for the development of the water power property of the Laconia Gas & Electric Co. at East Tilton. A new concrete power station of 800 KW. capacity will be built, together with a 7-mile transmission line to Lakeport. Step-down apparatus will be installed in the company's plant at the latter point. The present dam will be reconstructed, new headgates will be installed and the canal will be widened at both ends.

BOSTON, MASS.—See item under Water Supply—Irrigation.

WATERBURY, CONN.—The contract for the construction of the new steam generating plant in this city for the Connecticut Co. has been awarded to FRED. T. LEY & CO., of Springfield, Mass. The total cost of erection and equipment is estimated at approximately $150,000. The power-house will be a 1½-story structure, 98 × 151 ft., and will have a floor space of 14,798 sq. ft. The initial equipment will consist of two 1,500-KW. generators, and provision will be made for the installation of additional ones as the needs of the company may require. The plant is to be completed by fall. Its main purpose will be the generation of power in this section when, in consequence of low water, the New Milford Power Company's plant at Bulls Bridge on the Housatonic River fails to meet the demands made upon it.

BUFFALO, N. Y.—The Board of Supervisors will readvertise for bids on modified plans for the power plant for the Erie County Penitentiary, former bids having been rejected. Revised plans are being prepared. George C. Diehl is County Engr., 575 Ellicott Square Bldg.

NEW YORK, N. Y.—The Board of Estimate has requested the Comptroller to issue bonds for $56,200 to be used by the Department of Water Supply, Gas and Electricity to supply additional lights throughout the city.

EPHRATAH, N. Y.—The Mohawk Hydroelectric Co., of Ephratah, has been incorporated with a capital of $10,000, and will construct dams across Peck and Garoga Lakes to generate electricity for light, heat and power. The directors are S. A. Thoresen, of New York; Allen J. Nichols, of Brooklyn; H. M. Brinckerhoff, Ossining, and William P. Dunlop, Yonkers.

NEW BRUNSWICK, N. J.—The New England Water Power Co. has submitted a proposition to the Common Council to furnish electricity to the city at 1⅙ cts. per KW. hour, for power used during the day, provided the city uses 150 KW. during the term of the contract, the city to erect the distributing system, the cost of which is estimated at $40,000, making the annual cost of each lamp not over $45 per year. It also agrees to supply a customer to use the poles at an annual rental sufficient to pay the entire interest charge upon the cost of the distributing system. The Lighting Committee has recommended that a 24-hour contract be made, using the energy during the day to operate the water-works system, and that an engineer be engaged to prepare plans for necessary changes at the pumping station and for distribution system.

NEWARK, DEL.—The City Council has granted a franchise to the Elk River Light, Heat & Power Co., of Elkton, Md., to furnish electricity and water in Newark. The company will supply water from the Elk River, for which pipe lines will be built from Elkton to Delaware, six miles. Transmission lines will be erected for the same distance.

*BALTIMORE, MD.—Bids are asked until 3 p. m., June 30, by James Knox Taylor, Supervising Arch., Treasury Dept., Washington, D. C., for one new high-pressure steam water-tube boiler and accessories for the U. S. post-office, court-house, etc., at Baltimore.

BALTIMORE, MD.—The Patapsco Electric & Mfg. Co., Ellicott City, Md., has applied to the City Council for a franchise to erect transmission lines in West Baltimore. Otto Wunder is Ch. Engr.

DENTON, MD.—The Struthers Wells Co. has awarded contract to the ALLIS-CHALMERS CO., of Milwaukee, Wis., for a 115-KVA., 2,300-volt, 3-phase, 60-cycle, 900 r.p.m. alternator, together with a 4-KW., 120-volt belted exciter and switchboard.

WASHINGTON, D. C.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, until 3 p. m., June 15, for furnishing and installing lighting fixtures in the U. S. post-offices at Albuquerque, N. Mex.; Baker City, Ore.; Cheyenne, Wyo.; Kewanee, Ill.; Moline, Ill.; Ruston, La., and Sault Ste. Marie, Mich., in accordance with the drawings and specifications, copies of which may be obtained at the office at the discretion of the Supervising Architect.

WASHINGTON, D. C.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, until 3 p. m., June 22, for furnishing and installing light fixtures in the U. S. buildings at Bridgeton, N. J.; Dothan, Ala.; Fernandina, Fla.; Gainesville, Fla.; Paris, Ill.; Portland, Me.; Sumter, S. C., and Yazoo City, Miss., in accordance with the drawings and specifications, copies of which may be obtained at the office at the discretion of the Supervising Architect.

BEDFORD CITY, VA.—Contract for the construction of the municipal hydroelectric plant on the James River has been awarded, it is reported, to FRANCIS R. WELLER, 723 15th St. N. W., Washington, D. C. Mr. Weller will furnish complete plans and specifications, make surveys at dam, select site, make surveys for transmission line between the dam at James River and Bedford City, and remodel the present electric plant. Bonds for $100,000 have been voted for the work.

FREDERICKSBURG, VA.—Contract for the power plant for the Normal and Industrial School for Women, Fredericksburg, has been awarded to J. W. SARGENT, of Richmond, Va., and for heating and vacuum cleaning systems to W. P. LONGWORTH & CO., of Richmond; electric wiring to HARRISON & MONTAGUE, of Fredericksburg, and water system to SYDNOR PUMP & WELL CO., of Richmond, Va.

BEDFORD CITY, VA.—The Town Council has selected Francis R. Weller, of Washington, D. C., to prepare plans and specifications for the construction of a hydroelectric plant, make surveys at dam, select site, remodel present electric plant and make surveys for a transmission line between the dam on James River and Bedford City.

WHEELING, W. VA.—The Wheeling Traction Co. is contemplating the installation of additional equipment in its plant, including one 1,875-KW., low-pressure turbine, two 500-KW. motor-generator sets, with necessary switchboards and two motor-driven centrifugal pumps, with condensing apparatus, etc.

The Consumers' Electric Co. has purchased a site at the corner of 43d and Water Sts., on which to erect a new power-house. Estimated cost, $250,000.

GREAT FALLS, S. C.—The ALLIS-CHALMERS CO., of Milwaukee, Wis., has been awarded contract for the electrical equipment for the Republic Cotton Mills now under construction. The contract calls for 22 20-HP., 12 10-HP. and one 5-HP. squirrel-cage induction motors; one 125-HP., two 100-HP., two 75-HP. and one 50-HP. wound rotor, induction motors; three 200-KVA., 2,200-600-volt, oil-filled, self-cooled transformers; two 25-KVA., 2,100-105 volt transformers and an 11-panel switchboard. All the machinery will be driven by electric motors, the 4-frame drive being employed, and electricity for operating the mills will be supplied by the Southern Power Co.

DALTON, GA.—See item under Water Supply—Irrigation.

ATHENS, OHIO.—Bids will be received until June 16 by the Board of Trustees of Ohio University, at Athens, I. M. Foster, Secy., for furnishing material and erecting an addition to the power-house and building a new smokestack, and for new boilers, feed pumps, vacuum pumps and for the piping and radiators in Ellis Hall. Frank L. Packard is Arch., New Hayden Bldg., Columbus.

JACKSONVILLE, FLA.—See item under Water Supply—Irrigation.

TALLADEGA, ALA.—The Alabama Power & Development Co. has completed arrangements for the erection of its transmission line from Jackson Shoals to Talladega and from Jackson Shoals to Anniston.

CULLMAN, ALA.—Plans are being considered to increase the output of the municipal electric light plant, which will include the installation of additional engines and generators.

ELIZABETHTOWN, TENN.—W. J. OLIVER, of Knoxville, on May 24 secured the contract to build a 9,000-HP. plant on the Watauga River, eight miles above Elizabethtown.

DAYTON, OHIO.—Bids will be received until June 3 by J. C. Ely, Dir. Pub. Serv., for the gas, equipment and maintenance of each lamp necessary for lighting the streets, alleys, lands, squares and public places for periods of five and ten years, respectively, from date of contract, with incandescent lamps. The minimum number of gas lamps is 1,400.

CLEVELAND, OHIO.—The Cleveland Electric Illuminating Co. will build its new power plant on the lake front where water is available at practically no cost. Work is to be started in a short time. Estimated cost, $1,000,000. Robert Lindsay is Gen. Supt.

*CLEVELAND, OHIO.—Bids will be received by the County Building Commission of Cuyahoga County, 425 Garfield Bldg., Cleveland, until 2 p. m., June 29, for (a) the construction of a power plant building; (b) the installation of equipment therein; (c) the construction of a tunnel; (d) the installation of steam pipes and electrical cables connecting said power plant with said court-house building; (e) the construction and installation of condenser lines and equipment. John J. Boyle is Secy. Pro Tem. For details see advertisement.

MONTICELLO, IOWA.—Bids will be received until June 21 by the Building Committee, Board of Education, J. E. Bateman, Chn., for erecting a central power plant, also ventilating and heating a 10-room school and a high school in the Independent School District of Monticello. Harry E. Netcolt is Arch., Independence, Iowa.

FORT SNELLING, MINN.—Bids will be received until 10 a. m., June 11, by J. M. Campbell, Constructing Q. M., U. S. A., for remodeling the electric light system at Fort Snelling.

BRAINERD, MINN.—Plans are being prepared by Oscar Clausen, Consulting Engr., St. Paul, Minn., for the installation of an electric light plant.

WAHPETON, N. DAK.—Plans and specifications are on file at the office of Engineering News, New York, for steam heating plant at Wahpeton School. Bids are asked by R. G. Valentine, Comr. Indian Affairs, Washington, D. C., until June 14.

ST. LOUIS, MO.—The National Lead Co. is making improvements to its plant, including the installation of almost entire new power equipment. Contract has been awarded to the ALLIS-CHALMERS CO., of Milwaukee, Wis., for two 20 × 42 heavy-duty Corliss engines, one of which will be direct connected to a 250-KW., 240-volt, 110 r.p.m. generator, while the other will be provided with a rope fly-wheel for driving shafting; also for one 100-KW., 240-volt generator for direct connection to high-speed engine, 14 240-volt motors, ranging from 5 HP. to 50 HP., and a 6-panel switchboard.

*ST. LOUIS, MO.—Bids are asked until 3 p. m., June 27, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the installation of a conduit and electric wiring and gas-piping system in the U. S. post-office at St. Louis.

MURFREESBORO, ARK.—The Little Missouri Water Power Co., which proposes to construct two dams on the Little Missouri River above Murfreesboro, has filed its articles of incorporation with the Secretary of State. The company is capitalized at $100,000, and plans to supply water power for the operation of light and other plants within a radius of 40 miles of its plant. This will include the towns of Arkadelphia, Hope, Prescott, Texarkana, Ashdown and DeQueen.

STONEWALL, OKLA.—McKanna Power Development & Irrigating Co., Stonewall, has been incorporated with $500,000 capital stock to build a water-power electrical plant.

MAGNOLIA, COLO.—The Colorado-Arizona Mines Co., 43 Exchange Pl., New York, is erecting a hydroelectric plant, near here, and proposes to install a motor-driven hoist and air compressor.

MONTICELLO, N. MEX.—Surveys are being made for the Black Range Reduction Co. in this vicinity, in connection with the construction of a power plant. It is proposed to install a plant with an output of 200-HP. power, to be transmitted to the properties of the company, in the north end of the district.

CARRVILLE, CAL.—The Trinity Gold Mining & Reduction Co. is contemplating the construction of a 500-HP. hydroelectric power plant, utilizing the water power of Coffee Creek to operate it.

LODI, CAL.—The Board of Trustees has engaged H. H. Henderson, Engr., to take charge of the engineering work and construction of the electric light, water-works and sewer system here.

SAN FRANCISCO, CAL.—The War Department has instructed the Quartermaster-General to proceed to advertise for bids for the installation of a complete electric lighting system for the Presidio Grounds, San Francisco, Cal.

LOS ANGELES, CAL.—The Board of Public Works has awarded contract to the ALLIS-CHALMERS CO., of Milwaukee, Wis., for 21 440-volt, 3-phase, 60-cycle, belted induction motors for use in connection with work on the new water supply aqueduct. Seven of these have a rating of 125 HP. and the rest range down to 10 HP.

LONG BEACH, CAL.—The City Council has granted the Southern California Edison Co. a 21-year franchise to construct and operate three reinforced-concrete water-tight conduits, through which water will pass from the ocean to the power-house, to be built north of Salt Lake bridge. Bids will be received for the franchise until June 17, under the terms of which, after the first five years the company is to pay the city 2% of the gross annual receipts arising from the franchise.

ALAMEDA, CAL.—Contract for installing a salt-water intake for the municipal electric light and power plant at the south end of Park St., has been awarded by the Electricity Commission to FREDERICK C. ROBERTS & CO., of San Francisco, at $6,992.

LOS ANGELES, CAL.—Local capitalists have formed the Sierra-San Joaquin Electric Co. with $5,000,000 capital, practically all paid up, for the development of power on the Tulare River in Tulare County. The concern will operate in connection with the Pacific Light & Power Corporation and the San Joaquin Light & Power Co. in supplying electricity to the southern half of the San Joaquin Valley. Eight hundred thousand dollars' worth of work has already been done by the company, and $1,600,000 additional is to be expended within the year on the construction of the dams and an 8,000-HP. plant 25 miles above Porterville. From there the Kern and Midway oil fields are to be furnished light and power. This [illegible] nt above that of John Hays Hammon's M[illegible]nt Whitney Power & Electric Co., will [illegible] an entirely new field in power devel[illegible]ent. No filing has been made on the wa[illegible] for irrigating purposes and it will be [illegible]ed back into the stream. Maricona and [illegible] will be the first towns served. W. G. [illegible]hhoff is Pres.; Allen C. Balch Vice-Pres. [illegible]d L. M. Farnham, Secy.

MONTICELLO, ARIZ.—The Bl[illegible] Range Reduction Co. will erect a h[illegible]electric plant near here for the purpose o[illegible] providing power for its mill and mining ma[illegible]nery.

DOUGLAS, ARIZ.—The Heffern[illegible]ning & Development Co., which is opera[illegible] mines and reduction works about 20 [illegible]s from Douglas, will erect a hydroelectri[illegible]ant for the purpose of furnishing power [illegible] lights for its own use and for towns o[illegible]is section.

NEPHI, UTAH.—The citizens h[illegible] voted to issue $15,000 of bonds for cons[illegible]ting a new electric light plant.

GRANGEVILLE, IDAHO.—The G[illegible]geville Electric Light & Power Company's [illegible]nt and franchise, owned by S. E. Sweet a[illegible] H. Van Buren and under lease to Charle[illegible] Gustad, has been sold to the Bid Bend Pow[illegible] Co., of Davenport, Wash., owning and [illegible]rating light and power systems in eastern W[illegible]shington. The owners will improve an[illegible] expand the system by enlarging the dam, r[illegible]ilding the flume and extending the serv[illegible] lines into Cottonwood.

BOISE, IDAHO.—See item under Water Supply—Irrigation.

WINNIPEG, MAN.—We are officially advised that the Board of Control has awarded contracts, bids opened on May 16, as follows for conduit, conduit construction, erection of substation No. 2 and substation equipment: For construction of conduit runs, to G. M. GEST, Montreal and New York; for conduit, to the NORTHERN ELECTRIC & MFG. CO., Winnipeg, Man., 280,000 duct ft. single duct, as per sample submitted, at 7.82 cts. per duct ft., delivered f. o. b. cars Winnipeg, total, $21,896; for erection of substation building No. 2, to J. W. ASTLEY, Engr. of Construction, at $11,424; for McPhillips St. substation equipment erected and equipment in terminal station for control of May St. substation, to the CANADIAN WESTINGHOUSE CO., LTD., Hamilton at $29,616. M. Peterson is Secy.

MEDICINE HAT, ALTA.—We are officially advised that the city will soon ask for bids for the construction of an electric light and power plant. Estimated cost, $75,000.

COQUITLAM, B. C.—Bids will be received until June 6 by the Minister of Public Works, Victoria, for constructing a transmission line for the purpose of furnishing electricity for the Hospital for the Insane at Coquitlam. F. C. Gamble is Pub. Wks. Engr., Victoria.

LEON, MEX.—The Guanajuato Power & Electric Co. is constructing a 15,000-volt transmission line from Leon to Jalpa, the hacienda of Oscar Braniff. The line will run near the town of San Francisco del Rincon, where power and light will be disposed of.

PACHUCA, MEX.—The Compania de Luz, Fuerza y Ferrocarriles de Pachuca has been organized with a capital stock of $1,[illegible], all paid in, for the purpose of establishing large electrical enterprises in Pachuca and this vicinity. The company will install a hydroelectric plant and acquire water-power rights, construct and operate an electric street railway system and furnish power for mines and other industries. Among the Board of Directors are Joaquin D. Cassasus, Jacinto Pimentel and Jose Luis Requena, all of Mexico City; Leandro F. Payro and Rafael M. Arozarena, of Pachuca. Theodore Brandenburg is Gen. Mgr.

BRIDGES.

(denotes that this work is advertised in Engineering News.)*

NEW YORK, N. Y.—Bids are asked until 2 p. m., June 16, by Kingsley L. Martin, Comr. of Bridges, for constructing the painting platforms and runways for the Queensboro bridge.

ROME, N. Y.—FRANK W. TUTHILL has been awarded contract, at $3,437, for the construction of the abutments and wing walls of the proposed East Bloomfield St. bridge across the Mohawk River.

WATERTOWN, N. Y.—Bids will be received by E. W. Sayles, City Engr., until June 3, for furnishing and placing about 55,000 ft. of timber and plank treated with creosote or other preservative, and for 1,200 sq. yds. of wood block pavement and painting iron and steel work on viaduct over railroad tracks on Arsenal St.

ARCOLA (Warrenpoint post-office), N. J.—The Board of Chosen Freeholders on May 23 rejected all bids for the construction of a bridge here.

MONTEZUMA, PA.—The Board of Supervisors has awarded contract to the STARK CONSTRUCTION CO., of Des Moines, Iowa, for improving bridges in the county, at about $15,000.

OIL CITY, PA.—Bids were opened as follows on May 24, by the County Commissioners for the construction of a new bridge in Oil City, the substructure of the new bridge to consist of two masonry abutments and three piers, with concrete bases; the superstructure to consist of an approach on the south side 51 ft. long, one plate girder span 80 ft. long, three steel truss spans, each 347 ft. long and an approach on the north side 146 ft. long, and bridge and approaches to have a roadway clearance of 30 ft. and two sidewalks of not less than seven feet clear width: American Bridge Co., 30 Church St., New York, $203,500; McClintic-Marshall Construction Co., Pittsburg, $219,000; King Bridge Co., Cleveland, Ohio, $199,4[illegible]; Penn Bridge Co., of Beaver Falls, Pa., $223,339; Rogers Bros., of Albion, $207,653; Fort Pitt Bridge Co., of Cannonsburg, Pa., $203,690; Pennsylvania Steel Co., Steelton, Pa., $214,245. E. K. Smiley is Clk., Franklin, Pa.

BALTIMORE, MD.—Plans are being prepared for a steel bridge, 90-ft. span and 66 ft. wide, to be constructed over the Western Maryland R. R. tracks at Seventh St.

FAIRMONT, W. VA.—The city has voted $60,000 of bonds to improve bridges.

LEXINGTON, S. C.—Contract for completing the steel bridge over the Saluda River, bids opened on May 21, has been awarded to the CAROLINA ENGINEERING CO., of Burlington, N. C., at $11,980.

GREENVILLE, S. C.—The city will construct a concrete culvert under East Washington St. Bids are asked. A. E. Sussex is City Clk. and Treas.

CEDARTOWN, GA.—Bids are asked until June 20 by Polk County for constructing three concrete bridges. J. L. Moore is Chn. Comm. Roads and Revenues.

HUNTSVILLE, ALA.—The city will construct a concrete bridge over Pinhook Creek on West Holmes St.

DECATUR, ALA. — The SOUTHERN BRIDGE CO., Birmingham, Ala., has been awarded contract for the construction of a steel bridge over Cotace Creek, Morgan County. The bridge will have a span of 85 ft., and a 12-ft. roadway, on tubes.

VICKSBURG, MISS.—Bids are asked until noon, June 7, by the Chancery Clerk, for the construction of wooden bridge or aprons near W. C. Mallett's place, in Red Bone Bottom. J. D. Laughlin is Clk.

NILES, OHIO.—Contract for constructing the substructure of the bridge on Park Ave. has been awarded to L. H. YOUNG, of Niles. Bids were opened on May 23 by the County Commissioners of Warren.

LIMA, OHIO.—Bids will be received by the Board of Commissioners of Allen County, until noon, June 14, for the construction of a bridge over the Hog Creek, in German Township. C. R. Phillips is Clk.

DELAWARE, OHIO.—Bids are asked until noon, June 13, by W. H. Bodurtha, County Audr., Delaware County, for the construction of the east abutment of the Africa bridge in Orange Township.

LEETONIA, OHIO.—Bids will be received by the Board of Commissioners of Columbiana County, until 1 p. m., June 6, for the construction of masonry abutments and erection of a steel girder bridge at Leetonia, in Salem Township. C. H. Coburn is County Audr.

DAYTON, OHIO.—We are officially advised that bids were received as follows on May 25 by the Department of Public Service for constructing a 7-arch reinforced-concrete bridge, Melan system, over Great Miami River at Stewart St. Total length, 653 ft., roadway 40 ft., sidewalks 9 ft.: Gephart & Kline, of Dayton, $154,520; Gabler & Co., $165,452; Friestedt Co., $180,865.

NEWPORT, IND.—Bids are asked until 10 a. m., June 6, by the County Commissioners, for the construction of a 40-ft. steel girder bridge, including abutments and retaining walls. H. T. Payne is County Audr.

PLYMOUTH, IND.—Bids will be received by the Board of Commissioners of Marshall County, until 2 p. m., June 7, for the construction of the superstructure of an iron bridge in German Township known as the water tank bridge, having a span of 50 ft.; also for an iron bridge in German Township known as the Wambsgans bridge, having a span of 65 ft. C. M. Walker is County Audr.

FORT WAYNE, IND.—Local officials of the Wabash R. R. announce that plans have been approved for two new concrete bridges, one to be a 50-ft. girder, west of North Morenci on the Detroit division, and the other to be 275 ft. in length, to span the Rasin River. Both bridges will be constructed for double-track purposes.

LOGANSPORT, IND.—We are officially advised that the Pennsylvania R. R. Co. will build a new double-track concrete bridge at Logansport, across the Wabash River on its Logansport division. Contract has been awarded to the NATIONAL CONCRETE CO., of Indianapolis, Ind.

DANVILLE, ILL.—See item under Streets and Roads.

SPRINGFIELD, ILL.—Contract was awarded on May 21 to the McCLINTIC-MARSHALL CONSTRUCTION CO., Park Bldg., Pittsburg, Pa., for the large overhead bridge of the Illinois Traction system over the Chicago & Alton R. R. tracks out of the city, at $65,000. This is the bridge over the Alton tracks in connection with the building of the belt line about the city of Springfield. Piers on the bridge will cost about $8,000. The bridge, including approaches will be 2,400 ft. long.

ANAMOSA, IOWA—The CLINTON BRIDGE & IRON WORKS, of Clinton, has been awarded contract, at $7,650, for the erection of a new steel bridge across the Wapsipinicon River near the boundary line of Hale and Oxford Townships.

DES MOINES, IOWA.—John W. Budd, City Engr., has completed plans for a 6-span concrete bridge, 82 ft. wide, across the river at Walnut St. Estimated cost, $150,000.

COLUMBUS, NEB.—We are officially advised that the STANDARD BRIDGE CO., of Omaha, Neb., has been awarded contract by the county for repairing and rebuilding the Platte River wagon bridge on line between Polk, Butler and Platte Counties, at $37,000. Bids were opened on May 24. John Graf is County Clk.

WAHPETON, N. DAK.—Bids are asked until 2 p. m., June 6, by F. A. Burton, Audr., Richland County, for the construction of three pile bridges, separate bids to be received on wood or steel.

JAMESTOWN, N. DAK.—Bids are asked until 2 p. m., June 6, by Andrew Blewett, County Audr., for the construction of a concrete wall on the Main St. bridge in this city.

NEW CASTLE, WYO.—Bids are asked until noon, June 7, by the Board of County Commissioners for the construction of a bridge over the Stockade Beaver Creek. J. W. Howell is County Clk.

GLASGOW, MONT.—Bids will be received by W. B. Shoemaker, County Clk., until June 8, for the construction of a 475-ft. steel span bridge with 200 ft. of pile approach. W. H. Mann is County Surv.

MARYSVILLE, MO.—Bids are asked until June 8 by the County Commissioners for the construction of about 50 bridges throughout the county.

JEFFERSON CITY, MO.—The Board of Commissioners of Cole County will soon have plans prepared by F. C. Harding, Engr., for a steel and concrete bridge over the Osage River. Estimated cost, $40,000.

SAN ANTONIO, TEX.—Bids will be received by Fred Fries, City Clk., until June 25, extension of date from June 11, for constructing a plate girder bridge, either with or without center pier, across the San Antonio River at Travis St.

HOUSTON, TEX.—The Houston Belt & Terminal Ry. Co., F. J. La Pierre, Resident Engr., has awarded contract for a 240-ft. draw span and concrete piers to AMERICAN CONSTRUCTION CO., Houston, for substructure, and to WISCONSIN BRIDGE CO., Milwaukee, Wis., for superstructure.

GALVESTON, TEX.—The UNION BRIDGE & CONSTRUCTION CO., Kansas City, Mo., has secured contract for the construction of the two bridges on the Lometa-Brady-San Saba extension of the Santa Fe, one across the San Saba River and the other across the Colorado River.

GRANITE, COLO.—Bids will be received by Charles W. Comstock, State Engr., Denver, until noon, June 11, for the construction of a 66-ft. concrete steel highway bridge over the Arkansas River, near Granite, Chaffee County.

LARKSPUR, COLO.—Bids will be received by Charles W. Comstock, State Engr., Denver, until noon, June 11, for the construction of a 32-ft. concrete steel highway bridge over East Plum Creek, near Larkspur, Douglas County.

COLFAX, WASH.—Bids will be received until June 7 by the Board of County Commissioners, at Colfax, for constructing the Copper Lake Bridge across the South Palouse River. Bids will be received on a 2-span steel girder bridge, 60 and 45 ft. in length, respectively, wooden floor; a riveted steel truss bridge, 114-ft. span, 24-ft. roadway, concrete floor, 8-ft. sidewalk, and on a 2-span concrete girder bridge, 102 ft. long. Also same time and place for constructing the City Hall bridge in Pullman, across the South Palouse River, bids to be on an 80-ft. riveted steel truss bridge, 24-ft. roadway, concrete floor, 6-ft. sidewalk, and a 2-span, 80-ft. concrete, girder bridge. William M. Duncan is County Audr.

POCATELLO, IDAHO.—The Board of County Commissioners has authorized the construction of a steel bridge across Bear River at Soda Springs. Bids are soon to be asked.

LACHINE, QUE.—David McNicoll, Vice-Pres. Canadian Pacific Ry., stated on May 26, it is reported, that the company had decided to rebuild and double-track their bridge over the St. Lawrence River at Lachine, just above Montreal. The company's engineers are now working on the plans. Estimated cost, $1,500,000.

FORT WILLIAM, ONT.—Bids will be received until June 3 by the City Clerk, care of the Chairman of the Works Committee to construct a reinforced-concrete arched bridge, 50-ft. span, with pile foundations, to be used for double-track street railway, vehicular and pedestrian traffic, crossing the Neebing River on Simpson St. H. S. Hancock, Jr., is City Engr.

NEWMARKET, ONT.—We are officially advised that bids were opened on May 23 by Barber & Young, Engrs., 57 Adelaide St., Toronto, for the construction of a reinforced-concrete arch bridge of 60-ft. span over the Holland River at Timothy St. here. After receiving the bids the town decided to do the work by day labor.

BUILDINGS.

(* *denotes that this work is advertised in Engineering News.*)

KEENE, N. H.—Bids were received as follows on May 31, by James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., for the construction of a post-office building at Keene, N. H.: Norcross Bros. Co., Worcester, Mass., $70,900; Westchester Engineering Co., 39 East 42d St., New York, $63,820; A. E. Badgley, Binghamton, N. Y., $66,237; William H. Fissell & Co., 1133 Broadway, New York, $65,997; Oscawana Building Co., 200 Fifth Ave., New York, $67,000; Wheaton Building & Lumber Co., Putnam, Conn., $71,537; Charles W. Belleden, Inc., Boston, Mass., $71,875; J. E. & A. L. Pennock, Land Title Bldg., Philadelphia, $71,800; Richard E. Heningham, 1 Madison Ave., New York, $68,682; Conners Bros. Co., Lowell, Mass., $71,800; Charles W. Peckworth, 415 Hudson St., New York, $65,748; Woodbury & Leighton, 166 Devonshore St., Boston, $73,619.

BOSTON, MASS.—Bids are asked until 11 a. m., June 25, by R. C. Hollyday, Ch. of Bureau of Yards and Docks, Navy Dept., Washington, D. C., for repairing the foundation of Building No. 114, Navy Yard, Boston. Specifications are on file at the office of Engineering News, New York.

BUFFALO, N. Y.—Colson & Hudson, Archs., Dun Bldg., are preparing plans for a 3-story and basement building, 200 × 200 ft., at Main and Goodrich Sts. to contain stores, offices and a garage and to be of brick, structural iron and terra cotta construction. Cost, $100,000. John W. Gibbs, D. S. Morgan Bldg., is owner.

Colson & Hudson, Archs., 35 Dun Bldg., are completing plans for a store and office building and garage, 100 × 100 ft., two stories and basement, of brick, steel and terra cotta, to be erected at Main and North Sts., for John W. Gibbs, D. S. Morgan Bldg. Cost, $45,000.

NEW YORK, N. Y.—Bids are asked until 2.30 p. m., June 7, by M. J. Drummond, Comr., for providing all labor and materials necessary or required for the masonry, steel and iron work, roofing and metal work, carpentry, electric work, heating and ventilating work, plumbing work and all other work as set forth in the drawings and specifications for the alteration, repair, construction and entire completion, with the exception of fitting up, sterilizing apparatus and lighting fixtures of the improvements in operating rooms, elevators and machinery in the City Hospital Building, situated at the south end of Blackwells Island, Boro. of Manhattan, the City of New York.

Plans have been filed for a 5-story apartment house to be built on the south side of 179th St., 85 ft. east of Audubon Ave., for the C. & W. Building Co., Sylvain Weidenschlag, Pres. The facade will be of brick, with terra cotta trimmings, with a frontage of 85 ft. and a depth of 87 ft., with accommodations for 30 families. The cost is estimated at $80,000 by the architects, Neville & Bagge, 217 West 125th St.

A 15-story store and loft building is to be erected at 155 West 31st St. for William F. Donnelly, at a cost of $100,000. The building will have a frontage of 20 ft. and a depth of 59.9 ft. There is to be an extension. The facade will be of brick, with trimmings of terra cotta. George M. McCabe, 96 Fifth Ave., is Arch.

An office building is to be built by Sam S. & Lee Shubert, Inc., which will occupy the plot on the southwest corner of Sixth Ave. and 41st St., the property having been leased from Commodore Elbridge T. Gerry for a term of 63 years. There will be a frontage of 100 ft. in Sixth Ave., adjoining the new Union Dime Savings Bank on the 40th St. corner, while on 41st St., where the frontage will be 125 ft., the new building will adjoin the Shubert's new Comedy Theater. Work will be done next spring.

NEW YORK, N. Y.—Bids are asked by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, until 3 p. m., June 8, for the general construction, etc., of new Public School No. 46, on the northerly side of 196th St., between Briggs and Bainbridge Aves., Boro. of the Bronx.

Vincent Banagur is preparing plans for a 5-story building, on a plot, 50 × 100 ft., to be erected for the V. B. Construction Co. at the southeast corner of Seabury Pl. and East 172d St. It will cost about $70,000.

Plans have been filed for a 12-story elevator apartment house to be built on the east side of Park Ave., 27.2 ft. north of 75th St., for the 823 Park Avenue Co., George P. Walker, Pres. The building will contain apartments for only twelve families, one on each floor. It will have a frontage of 50 ft. and a depth of 79.10 ft. The cost is estimated at $300,000. Pickering & Walker are Archs., 103 Park Ave.

William A. White & Sons have negotiated a 21-year lease for the Trinity Church Corporation, which will erect an 8-story and basement fireproof building at the northwest corner of Canal and Sullivan Sts., 417, 419 and 421 Canal St. and 2 and 4 Sullivan St., for Peter A. Frasse & Co., a machinist supply firm, 30 Church St.

Plans have been filed for a 6-story private dwelling house for Edward W. Sparrow, to be built on the north side of 68th St., 175 ft. east of Madison Ave., with a frontage of 25 ft. and a depth of 68.1 ft., and with an extension 13 × 32.4 ft. The façade will be of brick, with trimmings of limestone. Estimated cost, $60,000. Parish & Schroeder, 12 West 31st St., are Archs.

NEW YORK, N. Y.—Bids are asked by John W. Brannan, Pres. Trustees, Bellevue and Allied Hospitals, until 3 p. m., June 7, for all labor and materials required for the alteration of Ward 31 of the Bellevue Hospital; also for the erection and completion of a temporary office building and the alteration of the Registrar's office.

George F. Pelham, Arch., 507 Fifth Ave., has filed plans for a 12-story fireproof building to be erected at 72 and 74 Madison Ave. for the Madison Holding Co., David Schaff, Pres. The façade will be of brick with limestone and terra cotta trimmings, with a frontage of 49.2 ft. and a depth of 86.8 ft. The building will cost $200,000.

Plans have been filed for a 15-story brick office building to be erected on the east side of Madison Ave., 74 ft. north of 24th St., next to the Madison Square Presbyterian Church, for the Pullman Holding Co., L. H. Slawson, Pres. The façade will be of brick, with trimmings of limestone and terra cotta, with a handsome entrance ornamented with Ionic columns. The cost will be $225,000. William H. Gompert is Arch., 2102 Broadway.

Schwartz & Gross, Archs., 377 Fifth Ave., have filed plans for making over the 5-story apartment houses at 2191 to 2199 Broadway, by putting store fronts and changing all partitions to make room to accommodate twice the number of families. There will be two families on the first floor and 14 on each of the others. The Seventy-eighth Street and Broadway Co., Walter H. Di Nike, Pres., is owner. The cost of the necessary alterations is placed at $75,000.

Plans have been filed for a 12-story store and loft building, with an extension, to be built for the A. and S. Construction Co. on the south side of 25th St., 400 ft. east of Sixth Ave., at a cost of $225,000. The façade will be of limestone, with trimming of terra cotta and will be fireproof, with a frontage of 50 ft. and a depth of 86 ft. C. B. Meyers, 1 Union Sq., is Arch.

NEW YORK, N. Y.—Plans have also been filed for a 3-story theater to be built on the north side of 116th St., 143 ft. west of Fifth Ave. The building will have a frontage of 40.11 ft. and a depth of 90.11 ft. and will be of brick, with a gallery, balcony, and orchestra. It will be used for vaudeville and moving pictures and is to cost $75,000. S. S. Sugar, 104 West 42d St., is Arch.

Neville & Bagge, 217 West 125th St., have filed plans for a 12-story elevator apartment, with stores, to be built for the Yorkshire Realty & Construction Co. at the southwest corner of Broadway and 113th St., with a frontage of 100.11 ft. on Broadway, by 90 ft. on the street. The façade will be of brick and of fireproof construction, with the stores on the Broadway front and the main entrance on 113th St. The cost is estimated at $300,000. The building will accommodate 47 families.

Plans have been filed for a 6-story brick, granite and terra cotta loft building to be built on the south side of 32d St., 95 ft. east of Lexington Ave. This building will take the place of three 3-story old-fashioned brick dwelling houses, three 5-story old tenement houses, and a 3-story frame dwelling with a brick front. The building will have a frontage of 108.3 ft. and a depth of 88.9 ft. with an extension. Henry Steiger is the owner. The cost is estimated at $100,000 by the architect, B. Hustace Simonson, 234 Fifth Ave.

NEWARK, N. J.—Application has been made to the authorities of Newark, N. J., by the Pennsylvania R. R. Co. for an ordinance to improve its passenger service between Newark and New York. The plan calls for replacing the present station with one to cost about $500,000. The two outer tracks are to be devoted to local traffic only, while the center tracks will be for through trains exclusively. The purpose of this is to completely separate local from through traffic. The draft of an ordinance on the lines applied for was prepared and referred to the Aldermanic Committee on Finance and a joint inspection with the railroad's engineers is to be made of the proposed work at once.

The contract for building the new 4-story and basement store for Oppenheimer, Collins & Co. on the old City Hall site at Broad and William Sts., has been awarded to FRED KILGUS, 13 South Sixth St., Newark. The contract calls for a 4-story brick, stone and iron structure, to cost $108,000. This does not include interior finishing, which will cost $42,000. Ground will be broken for the building at once, and it is expected that the building will be ready for occupancy Nov. 15. The Broad St. and William St. fronts will be finished in brick, with copper trimmings. There will be two passenger elevators and the building will be equipped with a system of steam heating and vacuum cleaning.

PHILADELPHIA, PA.—Bids were received on May 24 by the Committee on Property of the Board of Education for the erection of a new A. K. McClure school building at Sixth St. and Hunting Park Ave. This is to be a school of 21 divisions, built of brick and steel, fireproof. The lowest bidder was Cramp & Co., Commonwealth Bldg., whose estimates were $169,395 for the school as specified, built of brick and steel with granite trimmings, a deduction of $5,250 if sandstone were substituted for the granite, and a further deduction of $8,700 if concrete were used. The Committee has decided to adopt the concrete trimmings, this bringing the cost of the building to $155,445. Other bids were: B. Ketcham's Son, $178,116; Thomas Reilly, $177,322; Doak & Co., $173,625, and Mitchell Bros., $179,967. Harry H. Wehmeyer submitted the lowest bid of $16,000 for improvements to the Pastorius School in Germantown, but, owing to a technicality, the work will be readvertised.

CHAMBERSBURG, PA.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., June 29, for the construction complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring), of the U. S. post-office at Chambersburg, Pa.

SEWICKLEY, PA.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at Sewickley, Pa., to M. P. WELLS, Witherspoon Bldg., Philadelphia, at $54,676.

BALTIMORE, MD.—The New Theater Co. on May 26 awarded the contract for its building at the northeast corner of Park Ave. and Lexington St. to MORROW BROS., 216 West Saratoga St. The theater will take in the site of eleven stores, the last of which is now being razed. The contract calls for the finishing of the building by Oct. 1. It is to be 134 ft. on Park Ave. by 80 ft. on Lexington St., and will, when finished, seat over 1,700 persons. It will have two galleries. The outlay for the theater will be about $500,000. The New Theater Company is composed of the following persons: Pres., C. E. Whitehurst, 415 West Franklin St.; Vice-Pres. and Treas., G. E. Smith, 212 West Baltimore St.; Secy., W. S. Symington, 1000 Maryland Trust Bldg.; Directors, D. F. Mallory, Maryland Trust Bldg.; Edwin L. Hall, Maryland Life Bldg.; Charles Morris Howard, Baltimore Club; George C. Morrison, Baltimore Trust Co.

Application has been filed with Edward D. Preston, Building Inspector, 1637 Edmondson Ave., by Frank A. Munsey, for permission to commence the work of erection of the proposed Munsey building at 205-207 East Fayette St. The structure will be 14 stories high and will measure 80 × 110 ft. It will cost about $250,000. McKim, Mead & White, 160 Fifth Ave., New York, and Baldwin & Pennington, Professional Bldg., Baltimore, are Archs.

The Southern Supply Co. has purchased from Joseph Friedenwald the properties 315 and 317 North Calvert St., and 319 North Calvert St., on which it will build a 6-story store and warehouse. The lots measure 78 × 100 ft.

The lot at the corner of German and Grant Sts., which was purchased by Martien & Co., real estate brokers for clients, will be improved with a handsome 7-story office building for the United States Fidelity & Guaranty Co. to cost $200,000. The structure will be 65 ft. front on German St. with a depth of 72 ft. to Grant St., and will be an addition to the present building at Calvert and German Sts.

WASHINGTON, D. C.—Measures providing for the construction of Federal buildings have been reported favorably from the Senate Committee on Public Buildings and Grounds as follows: Narragansett Pier, R. I., $50,000; Lorain, Ohio, $130,000; Rochester, N. H., $80,000; Brookings, S. Dak., $75,000; Fort Atkinson, Wis., $50,000; Smyrna, Del.,

$25,000, and Humboldt, Tenn., $50,000. James Knox Taylor is Superv. Arch., Treasury Dept., Washington, D. C.

LYNCHBURG, VA.—JONES & ADAMS have been awarded the contract for a wholesale building for J. W. Ould & Co., at Ninth and Commerce Sts., at a cost of $51,000.

RICHMOND, VA.—Plans and specifications by Scarborough & Howell, Archs., 723 East Main St., Richmond, for the proposed State Fair Administration Building, for which the City Council has appropriated $45,000, have been approved.

HIGH POINT, N. C.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at High Point, N. C., to R. H. RICHARDSON & SON, of Hampton, Va., at $56,963. Time, July 1, 1911. A complete list of bids was given on May 26.

FORT SCREVEN, GA.—Bids are asked until 11 a. m., June 11, for construction and electric wiring of one quartermaster's storehouse and for construction and plumbing of one ordnance workshop.

GRIFFIN, GA.—Bids were received as follows on May 25, by James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., for the construction of a post-office at Griffin, Ga.: Algernon Blair, Montgomery, Ala., $49,357; King Lumber Co., Charlottesville, Va., $48,440; George Becking, Chattanooga, Tenn., $46,139; G. A. Clayton, Atlanta, Ga., $50,500.

FORT BARRANCAS, FLA.—Bids are asked until 11 a. m., June 15, by the Constructing Q. M., for constructing an extension to the guard-house at this post.

MEMPHIS, TENN.—Construction work on the proposed Lee building on the north side of Madison Ave. adjoining the Cordova Hotel, will begin at once. The building will be constructed of reinforced concrete, six stories in height, and completed for occupancy will cost between $85,000 and $90,000. Hanker & Cairns, Archs., Scimitar Bldg., have prepared the plans. Contractors and builders are figuring on them. All the construction work, the heating, plumbing, etc., will be included in one bid, according to the architect. The building will replace a 2-story landmark. The building will be fitted out for mercantile purposes for the entire six floors. The front will be finished with glazed brick with ornamental designs. An elevator of the latest improved style will be installed. The roof will be graveled. The specifications of the architects call for the completion of the building ready for occupancy Sept. 1.

OTTAWA, OHIO.—H. B. EVANS & CO., of Zanesville, Ohio, has been awarded the contract for the construction of the proposed court-house at $175,331, the building to be completed Aug. 1, 1911. Nineteen bids were received and were noted fully last week.

COLUMBUS, OHIO.—Plans are rapidly being completed for a warehouse 60 × 200 ft., to be built on the rear of the lot at High and Spruce Sts., which was formerly occupied by the Buckeye Buggy Co. The plans for the building were prepared by D. Riebel & Sons, Archs., New First National Bank Bldg.

JEFFERSONVILLE, IND.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., July 1, for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring and lift), of the U. S. post-office at Jeffersonville.

SEYMOUR, IND.—Bids will be asked soon by the Seymour Bath House Co. for the construction of bathhouse and natatorium. William Ahlert is Pres.

INDIANAPOLIS, IND.—S. E. Rauh has purchased a site on East Ohio St. upon which to build an office building with a frontage of 104 ft.

INDIANAPOLIS, IND.—Bids will be received until 1 p. m., June 10, by Henry Dupont, Arch., State Life Bldg., for the construction of a M. E. church in North Indianapolis.

BLOOMINGDALE, IND.—Bids are asked by Isaac Newlin, Trustee of Penn Township, until 10 a. m., June 20, for the construction of a brick school building.

ANDERSON, IND.—The Union Grain & Coal Co. is asking for bids for the construction of a warehouse.

FORT WAYNE, IND.—The Trustees of the Methodist Episcopal Church, Rev. William A. Griest, Pastor, will receive bids for the construction of brick and stone church. Estimated cost, $40,000.

CRAWFORDSVILLE, IND.—The Supreme Tribe of Ben Hur has decided to build a $150,000 home. Bids will be asked as soon as plans can be made and approved.

KENTLAND, IND.—We are officially advised that FRED FRIEDLINE & CO., 253 La Salle St., Chicago, Ill., have been awarded the general contract, including plumbing, heating and water-works, by the Newton County Commissioners to build for them the County Poor Asylum to be erected on the County Farm, Washington Township, Newton County. The building is to be a brick and stone structure of three stories and basement, with slate roof and with some reinforced-concrete work, and divided into two dormitories, with Superintendent's residence between. The contractors are having a switch put in on the Chicago, Indiana & Southern R. R. between Ade and Kentland for the delivery of construction material to the County Farm. They are in the market for the special materials necessary in the construction of the above building and expect to let sub-contracts for brick work, slate roofing, galvanized iron work, plumbing and heating and water-works system.

NEW HAVEN, IND.—Plans have been ordered for the construction of a central High School building. Bids will be solicited by the School Trustees as soon as plans are approved.

DETROIT, MICH.—Donaldson & Meier, Archs., Penobscot Bldg., and Ammerman, McColl & Anderson, Engrs., Penobscot Bldg., are preparing plans and specifications for an exposition building, 290 × 290 ft., for the Detroit Industrial Exposition. The building is to be of stucco construction. The entrance will be between two towers 110 ft. high. The Engineers are designing an electrical display in connection with the Exposition.

Smith, Hinchman & Grylls, Washington Arcade, have let the following contracts for a 2-story and basement office building, for C. G. Edgar, 532 Lafayette Boulevard: Masonry, to F. H. GODDARD, Ford Bldg.; carpentry, to SCHMEID-SISMAN & CO., 391 Beaufait Ave.; composition roofing, to VOIGHT & SEXANER, 148 Sherman St.; plumbing, to J. W. PARTLAN, 51 Park Pl.; plastering, to M. FINN, 138 Pine St.; painting to M. E. VONMOCH, 965 Michigan Ave.

Spier, Rohns & Gehrke, Chamber of Commerce Bldg., Detroit, have let the following contracts for a store building, four stories and basement for L. F. Traub, 205 Woodward Ave.: Structural iron and masonry, to F. H. GODDARD, Ford Bldg., Detroit.

GREENVILLE, ILL.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., June 30, for the construction complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring), of the U. S. post-office at Greenville.

CHICAGO, ILL.—John R. Thompson, County Treas., has under consideration the erection of a mercantile building on State St., 26 ft. north of 20th St., having a frontage of 166 ft. on the east side of the street, extending back to the right-of-way of the south side elevated road.

According to the Chicago "Tribune," Mr. Thompson has acquired 100 ft. of this frontage from Henry M. Henriksen, and while all the details have not been decided upon, present plans contemplate a 4-story and basement structure of heavy mill construction type, the cost of which probably will approximate $150,000. The remaining 66 ft. has been owned by Mr. Thompson for some time.

LEBANON, ILL.—Bids for the three new buildings at McKendree College, Lebanon, were received on May 23 at a meeting of the Joint Board. Gov. Deneen was present at the meeting. There were nine bidders, as follows: Hiram Lloyd, St. Louis, $87,516; Allen & Sons, Peoria, $88,978; Jobst & Son, Peoria, $92,776; Warren Construction Co., Chicago, $76,393; J. I. Simmons, Chicago, $76,395; Hanson Bros., Chicago, $89,365; James Gedney, Lebanon, $79,997; C. L. Gray Construction Co., St. Louis, $83,746; Murch Bros., St. Louis, $83,500. The two dormitories are to be 44 × 91 ft., three stories high, and the dining room is to be 52 × 107 ft., with basement, and will have a capacity of 300 students.

FOND DU LAC, WIS.—Bids are asked by the City Clerk of Fond du Lac until June 6 for the erection of new wings and remodeling the old high school building and for the plumbing and heating systems. The work is estimated to cost $150,000.

MILWAUKEE, WIS.—At the annual meeting of the Board of Trustees of Nashotah House, held May 26, in Milwaukee, it was decided to rebuild the building recently destroyed by fire. Plans were accepted and an additional structure will also be put up. The total cost will be approximately $60,000. It is expected to have the work completed before the September term of school.

APPLETON, WIS.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at Appleton, Wis., to G. MAFFIOLI & SONS, of Rockford, Ill., at $60,940. A complete list of bids was given on May 19.

DES MOINES, IOWA.—James M. Pierce, Pres. of the Homestead Co., will build a 10-story, steel frame, fireproof structure on his quarter of a block at the southwest corner of West Third St. and Grand Ave. Architects have submitted the plans for the building, and the construction is to begin late this summer or in the early fall. Cost, $250,000.

MUSCATINE, IOWA.—J. E. Mills, Washington Arcade, Detroit, Mich., has let the general contract for the First National Bank, Muscatine, Iowa, I. G. Stein, Pres., to W. M. ALLEN, SON & CO., of Peoria, Ill.

OTTUMWA, IOWA.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at Ottumwa, Iowa, to BARTLETT & KLING, of Cedar Rapids, Iowa, at $186,800. A complete list of bids was given on May 19.

ST. PAUL, MINN.—Gordon & Ferguson, wholesale dealers in furs, plan to build a sales building and warehouse at Third, Fourth, Market and Washington Sts. It will be fireproof, four or five stories. Cost, $400,000.

ST. PAUL, MINN.—The State Board of Control, Charles Halvorson, Chn., received bids on May 23 for the general construction of the inebriate asylum to be built at Willmar, Minn., as well as the industrial school for girls at Sauk Center, Minn. John Lauritzen, of Fergus Falls, Minn., was the low bidder, at $180,000 on the former and $159,375 on the latter. C. H. Johnston, Manhattan Bldg., St. Paul, is Arch.

Bids are being taken by G. H. Carsley, Arch., Endicott Bldg., for the construction of an addition to the Endicott Arcade. It will be of fireproof construction. L. S. Cushing is agent for owners, Endicott Bldg. Cost, $50,000.

FORT LEAVENWORTH, KAN.—Bids are asked by Capt. William D. Davis, Q. M., until 11 a. m., June 9, for construction, plumbing, heating, electric wiring and electric lighting fixtures of a building for quarters for four N. C. O.'s and an addition to the fire department building.

*COLUMBUS, NEB.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., July 11, for the construction complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the U. S. post-office at Columbus, Neb.

FORMAN, N. DAK.—A. C. THOMAS, of Blooming Prairie, Minn., has been awarded the contract for the general construction of the cut stone, fireproof court-house to be built here. His bid was $42,343. Beuchner & Orth, Manhattan Bldg., St. Paul, Minn., are Archs.

ST. LOUIS, MO.—A 22-story building will be erected, according to the St. Louis "Globe-Democrat," by the William Barr Dry Goods Co. Mauran, Russell & Garden, Archs., Chemical Bldg. Estimated cost, $3,000,000.

Plans are now being prepared for a $400,000 cathedral, to be erected by the Scottish Rites Masons, on Lindell Boulevard, east of the St. Louis Club. The purchase by the Masons for $61,000 of the old E. O. Stanard and Sloss residences, 3629 and 3631 Lindell Boulevard, secures a site for the building. Col. Nicholas M. Bell is Pres. of the Scottish Rites Cathedral Association. Work of razing the two houses now on the site will be begun at once and the erection of the cathedral commenced as soon as the architect completes the plans. The two lots cover about an acre and a quarter, with a frontage of 200 ft. and a depth of 234 ft. The cathedral will contain an auditorium, with a seating capacity of 4,000; a dining hall that will accommodate 2,000; library, symbol-room, small assembly hall and ladies' parlors. In addition to the cost of the building, about $75,000 will be expended on furnishings. The building will be two stories high in the front, with the auditorium and dining-room in the rear. It will be located on the crest of the hill, about 300 ft. west of Grand Ave.

The St. Louis Southwestern Ry. Co. has purchased two blocks of property in St. Louis centrally located, for individual freight terminals. The property is situated between Florida and Dickson St., and it is bounded on the east by Lewis St. and on the west by Main St. The amount involved is $1,259,000. The company, of which Edwin Gould is Pres., and F. H. Britton, of St. Louis, Vice-Pres., will construct a freight depot and yards on the ground, which is 1,000 ft. in length by 275 ft. in width. The improvements will cost about $1,000,000, bringing the total investment up to $2,250,000.

HOUSTON, TEX.—Plans have been prepared by C. D. Hill & Co. for a church building to be erected at the corner of Jefferson Ave. and Main St. by the First Church of Christ, Scientist. The preliminary plans have been approved on by the Building Committee and the architects have been authorized to proceed with the preparation of the working plans and specifications. The church will be erected at a cost of between $40,000 and $50,000. It will be patterned after the modern style of architecture and have a seating capacity for about 600. As soon as the specifications have been completed bids will be advertised for, and it is expected that work will be commenced within the next two months. G. R. Christie is Chn. of the Com. that will have charge of the construction of the building.

DALLAS, TEX.—To the FRED A. JONES CO. has been awarded the contract for the structural steel for the 12-story building to be erected on Main St., west of Ervay, by H. L. Edwards and Guy Sumpter, of Dallas, and F. J. Phillips, of Greenville, for $80,000. The building will be 100 × 190 ft. in dimension and will contain 440 offices. It will be located 175 ft. west of Ervay St., on the south side of Commerce St. The first floor will be fitted for store purposes and the upper floors for offices. The cost of the completed building will approximate $450,000.

GALVESTON, TEX.—A movement has been inaugurated for the construction and operation of a cotton concentrating warehouse at Galveston, according to the Houston (Tex.) "Post." The company will be capitalized at $100,000, divided into 1,000 shares of stock at $100 per share. Enough stock has been subscribed to insure the construction of the warehouse, for which plans have been drawn and bids invited. A site embracing about ten acres of land has been leased from the Galveston Wharf Co. immediately back of the company's wharf sheds at Pier 35. The facilities will comprise two covered sheds and platforms open on all sides and occupying a space of 616 × 110 ft., the warehouse extending north and south with railroad tracks on either side. In addition to the covered sheds and warehouses there will be available 75,000 sq. ft. of yard space. The platform and warehouse floors will be elevated to a level with the car doors for the better handling of the cotton and from the cars and platforms. Among the stockholders are Hutchings, Sealy & Co., Adoue & Lobit, R. Waverley Smith, C. H. Moore, H. Kempner and W. L. Moody & Co., of Galveston. It is estimated this warehouse can handle about 800,000 bales during the season, and the promoters declare it one of the most important movements ever inaugurated for the port. The plan is simply to provide facilities and other strong inducements for the concentration of cotton at this port, where it will be classified, marked, weighed, and in fact handled for export shipment even to its loading on the ships. The warehouse and platforms will be so arranged that cotton can be unloaded direct from the cars to the platforms on one side of the warehouse, classified, weighed and marked and then loaded into cars on the other side of the warehouse and carried to the shipside. The warehouse will be right on the wharf company tracks and convenient to all the piers.

EL PASO, TEX.—O. H. Baum will let the contract for his proposed building on Santa Fe and West San Antonio Sts., in June. Mr. Baum's plans call for a 5-story building constructed of steel and concrete. It will front 120 ft. on San Antonio St. and 112 ft. on Santa Fe St. and will occupy the southwest corner of the two streets. There will be a basement under the entire ground floor and extending out under the sidewalk. Cost, $80,000.

It is stated that Z. T. White, E. [illegible]lberg and L. E. Booker will also erect [illegible] and concrete buildings on West San Antonio St. this year, and that the new buildings will be four and five-story structures, to cost in the aggregate about $200,000.

SULPHUR, OKLA.—We are officially advised that Charles W. Sudhoelter Co., Archs., of Muskogee, Okla., will erect about ten buildings for the Deaf and Dumb School at Sulphur. The buildings will cost $100,000, and the equipment $40,000. The Board of Regents, at Guthrie, Okla., is considering plans and specifications. Bids will be called for about July 1. Noted on May 19.

DENVER, COLO.—Plans are being drawn for a 6-story fireproof building, with [illegible] ft. frontage, to be erected on California St. between 16th and 17th Sts., on the property recently used by the Bob White restaurant, northeast of the Mack Block. Louis Mack, who owns the Mack Block, will put up the new building, and it will be constructed along the same lines. Work probably will be started within the next month. The Famous Wrecking Co. has taken out a permit for wrecking the old 1-story buildings, which stand on the property.

NORTH YAKIMA, WASH.—Bids were received as follows on May 31, by James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., for the construction of a post-office building at North Yakima, Wash.: North-Western Construction Co., Wahpeton, N. Dak., $147,000; William H. Maxwell, Tacoma, Wash., $141,763; Welch Bros., Salem, Ore., $124,937; Sound Construction & Engineering Co., Seattle, Wash., $118,[illegible]

SPOKANE, WASH.—Construction work on a 5-story building to be built by Mrs. Clayton Miller, east of Washington St., extending through from Sprague St. to First, will be started at once. Plans are being prepared by A. Jones and J. T. Levesque. Cost, between $90,000 and $100,000.

PORTLAND, ORE.—Gibson & Cahill, Archs., Henry Bldg., are preparing plans for the R. R. Thompson Estate Co. for a $750,000 hotel to occupy the entire block at Third, Fourth and Ash Sts. It will be six stories and basement, Class A. Mr. Cahill, one of the architects, is also a member of the San Francisco firm of Wright, Rushforth & Cahill. The contract has just been let for wrecking and clearing the entire block. There will be over 300 baths, four passenger elevators, an elaborate steam-heating and pumping plant, refrigerating and ice-making plant.

OAKLAND, CAL.—Cumming & Weymouth, Archs. and Engrs., Macdonough Bldg., have completed the plans and specifications for a 5-story loft building, to be constructed of either brick or concrete and terra cotta, at a cost of $70,000, in the south side of 14th St., between the properties now occupied by the First Methodist Church and the Eastern Outfitting Co. The proposed building will be owned by A. D. Wilson, Vice-Pres. of the Security Bank & Trust Co., and will be used for either business offices or by a large company. The ground floor is to be adaptable for use by a store, and the upper four stories will be lofts that can be used for either storehouses or business offices. The building will have a frontage of 50 ft. and a depth of 100 ft. The inside fittings and wood work will be of the best material and of the most modern design. It will be a steel frame structure and will contain passenger, freight and sidewalk elevators, all of the latest improved type.

SAN FRANCISCO, CAL.—William F. Wilson will build a 7-story Class B building on the northeast corner of Stockton St. and Campbell Pl., to cost $85,000.

Charles M. and Arthur F. Rousseau, Archs., Monadnock Bldg., according to the San Francisco "Call," report the following work in preparation in their office. A 3-story and basement brick and frame building containing 19 apartments of two, three and four rooms and bath each, for T. Rulfe, at the northwest corner of Pine and Leavenworth Sts., at a cost of $35,000; twelve apartments of four rooms and bath for Mrs. Fannie Rousseau in the north side of Sacramento St. east of Polk at a cost of $25,000; 24 apartments of four and five rooms for Mrs. McKill in the north side of Washington St., between Hyde and Leavenworth St., at a cost of $55,000; six flats of six and seven rooms for Mrs. Ella T. Costich in the north side of Jackson St. west of Jones; a 5-story reinforced concrete building containing 18 apartments of two and three rooms in the south side of Bush St. west of Hyde; 14 apartments of two, three, four and five rooms for Mrs. McDonnel in the north side of Fell St. west of Laguna at a cost of $25,000; six apartments and a store for William Spreen at the southeast corner of Second Ave. and Clement St., at a cost of $11,000; two flats of six rooms for Mrs. Fredericks in the north side of Grattan St. east of Cole at a cost of $6,000; twelve apartments for Arthur F. Rousseau of two and three rooms in the north side of Pine St. west of Leavenworth; a 5-story reinforced-concrete apartment house for Arthur F. Rousseau at the southwest corner of California and Leavenworth St., containing 24 apartments of two and three rooms, at a cost of $60,000, and four flats for J. Ferte in the west side of Tremont Ave. south of Frederick St., at a cost of $10,000.

LOS ANGELES, CAL.—A 6-story Class A store and hotel building will be erected immediately at a cost of $110,000 at the southeast corner of Eighth St. and Grand Ave., for T. R. Cope. It will be 95 × 115 ft. and contain seven stores on the first floor and 115-room hotel above.

Plans for a 3-story, 30-room apartment house to be erected on Lake St., between Ninth and Tenth Sts., for E. L. Allen, have been prepared by Neher & Skilling, Pacific Electric Bldg. It will have twelve bathrooms, and disappearing beds. The walls will be of frame with cement plaster over metal lath. Later the size of the house will be doubled.

A [illegible]-story and basement brick apartment house to cost $50,000 will be erected at the northeast corner of Orange and Valencia Sts. for W. H. Owens. It will be 87 × 135 ft., have steel beams and columns and pressed brick front. The entrance will be finished in marble and tile, and the lobby will have scagliola wainscot and tile floor. There will be [illegible] apartments of two and three rooms, each with private bath. In the basement will be an amusement hall and there will be a garden on the roof. The plans are being prepared by A. L. Haley, Inc., Citizens' National Bank Bldg.

Plans have been completed for an 8-story building to be constructed on the west side of South Los Angeles, between Second and Third Sts., by the California Clay Mfg. Co. It will be 56 × 195 ft., and will have a front of glazed brick, trimmed with terra cotta, marble and tile corridor, plate glass windows and bronze elevator enclosures.

Plans are being prepared for the 8-story building to be constructed at the northeast corner of Los Angeles and Fourth Sts., for the H. W. Hellman Estate.

LOS ANGELES, CAL.—RICHARDS-NEUSTADT CO., Wright and Callender Bldg., has secured the contract, at $70,000, for erecting a 7-story hotel for F. C. Finkle, at Sixth and Flower Sts. H. M. Patterson is Arch., O. T. Johnson Bldg. The structure will be fireproof, of reinforced-concrete construction, and 50 × 75 ft., with clay-tile roof.

FRESNO, CAL.—The Trustees of the Independent Order of Odd Fellows of Santa Clara Valley have had plans drawn for a $100,000 lodge home to be erected near Fresno. The structure will be two stories high, of reinforced concrete. The first floor will contain administration rooms, a dining room and culinary department; second floor will contain sleeping rooms. A hospital with accommodation for 50 people is provided for. Fred. E. Pierce, of City and County Bank, of Los Angeles is one of the directors.

BOISE, IDAHO.—Bids are asked by the Constructing Q. M., Boise, until 2.30 p. m., June 8, for construction, plumbing, steam heating, and electric wiring of one field officers' quarters, one 4-set officers' quarters and construction, plumbing and wiring of two cavalry stables, all of brick, with slate roof, at Boise Barracks, Idaho.

FRASERVILLE, ONT.—We are officially advised that a city hall, to cost $40,000, will be built here. George Ouimet is City Engr.; M. Fraser, Mayor.

WALKERVILLE, ONT. — Donaldson & Meier, Penobscot Bldg., Detroit, have let the general contract for the 3-story and basement residence, 50 × 78 ft., for Tracey McGregor, Ford Bldg., Detroit, to C. J. KELLER & CO., 657 Canfield Ave. East, Detroit. The residence is to be located in Walkerville. Cost, $75,000.

MEXICO CITY, MEXICO.—In six months the foundation and steel skeleton will be completed for the $1,250,000 structure to be erected on the property adjoining the extension of Calle Gante, from Avenida 16 de Septiembre to Calle Zuleta. The property is owned by J. M. Gargollo, who has awarded two of the contracts, and h s pending negotiations for the awarding of the third. The first contract, for the construction of the foundation, has been let to WILLIAM P. CARMICHAEL & CO., of St. Louis, Mo., which firm is now constructing the Y. M. C. A. building in this city. The second contract for the construction of the skeleton of the 5-story building, that is the steel frame work, has been let to the UNITED STATES STEEL PRODUCTS EXPORT CO., of New York. The third and last contract, for the completion of the building after the foundation and steel frame are finished, has not been let, but negotiations are on, and it will be awarded soon. This building will face on three streets, Avenida 16 de Septiembre, Calle Zuleta and the extension of Calle Gante, which the Governor of the Federal District says will be opened for traffic by the first day of next September. The building will be five stories above the ground, and will contain a basement. It will be of steel construction, reinforced concrete, stone and brick and finished in marble. Plans for the building were drawn by Jose Luis Cuevas. The style of the hotel will be Louis XVI. The main entrance will be on Calle Gante. Two other entrances are planned for 16 de Septiembre and Zuleta. All entrances will be flanked by marble columns. It is the plan of the builder to use the basement for kitchens, ware and store houses, and a general service department. The ground floor will be used for offices, dining rooms and salas. At either end of the structure, on 16 de Septiembre and Zuleta, the plans call for a large dome, each of which will contain a gallery. Six elevators will be operated, two at the Gante entrance, two at the Zuleta entrance and two on the 16 de Septiembre entrance.

MEXICO CITY, MEX.—See item under Water Supply—Irrigation.

MEXICO CITY, MEX.—El Banco Londres y Mexico, of this city, will soon let the contract for the construction of a bank building. The plans for the proposed structure have been drawn and approved.

WATER SUPPLY—IRRIGATION.

(denotes that this work is advertised in Engineering News.)*

CHERRY VALLEY, MASS.—The Cherry Valley & Rochdale Water District will construct water-works. Estimated cost, $75,000. Nathan E. Craig, of Spencer, is Engr. For further information address Channing Smith, of Cherry Valley.

BOSTON, MASS.—Bids are asked by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a. m., June 4, for fire-protection and heating systems for extension of building No. 62 at the navy yard, Boston. Specifications are on file at the office of Engineering News, New York.

BROOKLYN, N. Y.—Bids are asked until 2 p. m., June 8, by Henry S. Thompson, Comr. Water Supply, Gas and Electricity, Manhattan, for furnishing, delivering and erecting smokestacks and appurtenances at various pumping stations, Boro. Brooklyn.

*NEW YORK, N. Y.—Bids were opened on May 24 by the Board of Water Supply for (a) Contract No. 44, sluice gates, and (b) Contract No. 80, constructing tunnels, as follows: (a) Contract 44, furnishing, delivering and installing six 6-ft. by 15-ft. sluice gates, 25 5-ft. by 13-ft. sluice gates, four 5-ft. by 8-ft. back pressure sluice gates, seven 5-ft. by 8-ft. sluice gates, six 5-ft. by 6-ft. sluice gates, three 4-ft. by 5-ft. sluice gates, eight 3-ft. by 5-ft. sluice gates, three 30-in. by 42-in. sluice gates, two 18-in. by 24-in. sluice gates, with operating mechanisms, two sets of drive shafting and all appurtenances, complete, at Ashokan, Kensico and Hill View reservoirs, and in various structures along Catskill aqueduct: Snare & Triest, 143 Liberty St., $219,520; Wheeling Mould & Fdy. Co., 30 Church St., $199,605; Ogden Iron & Steel Co., 143 Cedar St., $208,300; Caldwell, Wilcox Co., Newburgh, N. Y., $187,578; Coffin Valve Co., Boston, Mass., $208,356. (b) Contract 80, construction of Breakneck tunnel, portions of Hudson River division of Catskill aqueduct, comprising about 710 ft. of plain concrete conduit known as aqueduct in open cut, or cut-and-cover aqueduct, 17 ft. high × 17 ft. 6 ins. wide inside, and a tunnel on the hydraulic gradient about 1,055 ft. long, 17 ft. high × 13 ft. 4 ins. wide inside, connecting by a shaft about 590 ft. deep with a deep pressure tunnel 14-ft. inside diameter and about 700 ft. long. The work is located in the towns of Fishkill, Dutchess County, and Phillipstown, Putnam County, N. Y.: Dravo Contracting Co., Lewis Block, Pittsburg, Pa., $456,515; George W. Jackson, Chicago, Ill., $535,513; Hagerty & Drummond, 41 Park Row, $584,876; Metropolitan Contracting Co., Boston, Mass., $547,792; Patterson Co., $581,830; P. J. Carlin Construction Co., 16 E. 23d St., $573,505; McArthur Bros., 7 Pine St., $584,412. Lowest bidder noted last week.

NEW YORK, N. Y.—Bids are asked by the Department of Water Supply, Gas and Electricity until 2 p. m., June 15, for furnishing and delivering double-nozzle fire-hydrants and for repaving or replacing cornices, gutters, leaders, roofs and valleys at various pumping stations, Boroughs of Manhattan, Brooklyn, Queens and Richmond. Henry S. Thompson is Comr.

OLEAN, N. Y.—Bids will be received by the Board of Water Commissioners, Charles Keenan, Secy., until June 8, for furnishing about 2,800 ft. of 18-in. c.-i. pipe and 580 ft. of 6-in. pipe; also same time and place for trenching, laying and back-filling for constructing about 3,100 ft. of 18-in. water lines and 580 ft. of 6-in. line.

GENEVA, N. Y.—William S. Johnson, Engr., 101 Tremont St., Boston, Mass., in his report to the Board of Public Works on the improvement of the water-works and sewers, has recommended a 20-in. main filtration plant, reservoir and sewage disposal plant at a cost of $166,600; with partial sewage disposal plant, $121,000.

NIAGARA FALLS, N. Y.—We are officially advised that bids were received as follows by the city on May 20 for the construction of a filtration plant of 16,000,000 gallons daily capacity: Norwood Engineering Co., Florence, Mass., $234,565, 350 working days; Pittsburg Filter Mfg. Co., Farmers Bank Bldg., Pittsburg, Pa., $250,315, 425 days; American Water Softener Co., Philadelphia, Pa., $250,694, 280 days; Roberts Mfg. Co., 217 Diamond St., Pittsburg, $258,607, 500 days; New York Continental Jewell Filtration Co., New York, 260,670, 460 days; F. T. Ley Co., Springfield, Mass., four bids, $283,830, $285,800, $279,300, $235,000, 300 days. (The last two bids not in accordance with city specifications.) John W. Alvord and Charles B. Burdick are Engrs., Hartford Bldg., Chicago, Ill.

PERTH AMBOY, N. J.—Six bids were received by the Water Board on May 18 for two new 200-HP. boilers. The Erie City Iron Works Co. was the lowest bidder, at $4,435.

*PITTSBURG, PA.—Bids are asked by the Board of Inspectors of the Western Penitentiary of Pennsylvania, addressed to John Francies, Warden, Pittsburg, until noon, June 15, for the construction of a steel water storage reservoir of 150,000 to 175,000 gallons capacity. Plans, specifications and forms for bidding, and all information may be obtained from Samuel E. Duff, Consulting Engr., 706 Empire Bldg., Pittsburg.

NEWARK, DEL.—Bids will be received until 8 p. m., June 6, by the City Council for furnishing and laying 4-in. c.-i. water pipe. L. B. Jacobs is Chn. Light and Water Com.

HANCOCK, MD.—Pennington & Fairley, 411 Marine Bank Bldg., Baltimore, are preparing plans for the construction of the proposed water-works. Estimated cost, $20,000.

FREDERICKSBURG, VA.—See item under Light and Power Plants.

WILMINGTON, N. C.—We are officially advised that the city will construct water, sewer and paving improvements. C. R. Humphreys is City Engr.

ATLANTA, GA.—Bids will be received by the Board of Water Commissioners and Bond Commission until June 21 for furnishing and erecting an 8,000,000-gallon horizontal pressure filter plant. W. Z. Smith is Gen. Mgr.

JEFFERSON, GA.—We are officially advised that the city proposes to improve the water and sewer systems. Homer Hancock is City Clk.

DALTON, GA.—The H. S. Jaudon Engineering Co., of Savannah, Ga., has been engaged by the city to supervise the improvements to be made to the water-works, electric light plant, sewers and paving.

JACKSONVILLE, FLA.—We are officially advised that the city proposes to construct new water-works and electric light plant. R. N. Ellis is Supt. W.-Wks. Philip Prioleau is City Engr.

SEMINARY, MISS.—The city has awarded contract to W. P. COOPER, Shubuta, Miss., for constructing water-works.

BROOKVILLE, MISS.—Bids are asked by the city, until June 7, for the construction of a water-works plant. G. B. Baskerville, Jr., is Engr., Macon, Miss.

CRYSTAL SPRINGS, MISS.—The city has awarded contract to the MEMPHIS STEEL CONSTRUCTION CO., of Memphis, Tenn., for constructing a 100,000-gallon hemispherical-bottom steel tank, on 100-ft. steel tower, at $4,070. C. Plummer is City Engr.

HAZLEHURST, MISS.—Bids are asked by the city until June 7 for steel reinforced-concrete reservoir, capacity not less than 250,000 gallons. E. M. Cook is Mayor.

HOMER, LA.—The city will spend about $40,000 for the construction of water-works. A. R. Johnson is Mayor.

MANSFIELD, OHIO.—The proposed 12-in. pipe line to be constructed in the manufacturing district will cost about $7,500. J. Cahall is Dir. Bd. Pub. Serv.

LIMA, OHIO.—Bids are asked until noon, June 9, by S. S. Wheeler, Secy., for complete water supply system and laundry apparatus for the District Tuberculosis Hospital. Bids will be received on both compression and elevated tank water-supply system. McLaughlin & Hulsken are Archs., Lima.

YOUNGSTOWN, OHIO.—We are officially advised that the city proposes to construct a reservoir. Estimated cost, $1,000,000. William Lewis is Supt. W.-Wks. Frank Lillie is City Engr.

BATESVILLE, IND.—Bids will be received until 7 p. m., June 16, for the extension of the water mains of the city. Jacob F. Drescher is City Clk.

GRAND RAPIDS, MICH.—Hering & Fuller, Engrs., 170 Broadway, New York, are preparing plans for a water softening filter plant for the city. Estimated cost, $350,000.

KALAMAZOO, MICH.—We are officially advised that the city is to construct water extensions and paving. W. F. Reed is Supt. W.-Wks. H. A. Johnston is City Engr.

*STEGER, ILL.—We are officially advised that contract has been awarded to J. E. PICKENS, of Kankakee, Ill., for a combined system of water supply mains, at $18,950. Bids were opened by the Board of Local Improvements on May 16.

MACOMB, ILL.—Bids are asked by the city addressed to Charles B. Smithers, City Clk., until 5 p. m., June 11, for extensions to the water-works system, including 12-in. c.-i. pipe line, about 6,500 ft., and a concrete dam with flood gate about 70 ft. long; also gravity filtration system of 1,000,000 gallons capacity; two centrifugal pumps of 600,000 gallons capacity each; one engine of sufficient power to operate said plant; one battery of two boilers 66 ins. in diameter and 16 ft. long, high pressure, with all equipment; one feed-water heater, of at least 200 HP.; 18-in. c.-i. pipe line, about 100 ft.; one circular concrete reservoir 40 ft. in diameter and 15 ft. deep; one intake crib; one well not less than six feet in diameter and of a depth at least six feet below low water level of creek; one smokestack about 75 ft. high; necessary building to enclose all machinery, filter system and equipment.

WAUSAU, WIS.—We are officially advised that the city will construct new water-works. H. W. Jackson is Supt. W.-Wks. B. C. Gowan is City Engr.

PORTSMOUTH, IOWA.—Bids will be received until June 6 by Peter Harkenmath, Mayor, for constructing a steel standpipe, 75 ft. high and 10 ft. in diameter.

NICOLLET, MINN.—Bids will be received until June 6 by M. J. Frey, Village Recdr., for laying water mains in portions of Fifth, Pine and Ash Sts.

SAVAGE, MINN.—Bids are asked until June 5, by M. F. Zeller, Village Clk., for the construction of four combination wells and cisterns for fire protection, cisterns to be 8 ft. and 10 ft. deep, wells 20 ft. deep, with 4-in. pipe.

INTERNATIONAL FALLS, MINN.—Bids will be received until June 7 by R. C. Fraser, Village Recdr., for furnishing and laying water pipe in portions of several streets.

PETERSBURG, NEB.—Bids will be received by Gus Diers, Village Clk., until 4 p. m., June 10, for constructing water-works, requiring, approximately, 8,960 ft. of 6 and 5-in. c.-i. mains; 4,800 ft. of 2-in. g.-i. mains; 4,500 lbs. c.-i. specials; 17 4-in. hydrants, 50,000-gallon tank on a 100-ft. tower foundation of concrete; 8-in., 150-ft. drilled well; double acting deep-well pump, 5-in. cylinder, 15-HP. direct-connected gasoline engine, etc. Archer, Rollins & Co., Beals Bldg., Kansas City, Mo., are Engrs.

GRAND FORKS, N. DAK.—See item under Sewers.

CHEYENNE, WYO.—Bids are asked until 2 p. m., June 21, by the Water and Sewerage Committee for the construction of a reinforced-concrete lined reservoir, five miles from the city, requiring approximately 2,800 cu. yds. of concrete and 55 tons reinforcement. Cement, pipe and specials will be furnished by the city. The entire work is to be completed within 3½ months after date of awarding contract. F. A. Bacon is City Clk.

LAUREL, MONT.—The Park City Water Co. has been incorporated with a capital of $10,000. The company will construct a reservoir and other work will be done.

WINDSOR, MO.—The city is having plans prepared by Archer, Rollins & Co., Beals Bldg., Kansas City, Mo., for water-works and sewer system. Estimated cost, $40,000.

EL PASO, TEX.—The citizens on May 12 voted in favor of municipal ownership of the water-works. An election will be held on June 21 to issue $375,000 of water-works bonds.

The Reclamation engineers in El Paso have received instructions from the Federal Government to proceed at once with the work on the construction of the Elephant Butte dam. Estimated cost, $9,000,000. The work will require nine years to complete. The dam will irrigate 225,000 acres and will fulfill a treaty obligation with Mexico furnishing water for irrigating as much land as the Mexicans cultivated prior to the interference with the waters of the international boundary stream by the diversion of water in Colorado. Work has been delayed owing to condemnation proceedings for the land needed for the 40-mile lake to be formed by the dam.

DALLAS, TEX.—Contract for furnishing 600 tons of c.-i. pipe has been awarded to the U. S. CAST IRON PIPE & FOUNDRY CO., at $38.35 per ton; specials, $50 per ton. Bid permits substituting 56 joints of 24-in. pipe with 600 tons of 8-in. and reduction from $28.90 to $28.35 per ton.

HOUSTON, TEX.—Plans are being prepared for laying of separate 12-in. water mains in the business district of Houston, to be used exclusively for fire service. The new mains will replace the 4 and 6-in. mains in the heart of the city which are now being used for both fire and domestic purposes. The 4 and 6-in. mains will not be discarded entirely, but will continue to be used for domestic purposes. The fire hydrants will be disconnected from the small mains and connected with the large mains, thereby increasing the supply of water for fire service. The city has adopted the plan of laying no mains smaller than 8-in. in any part of the city, the 8-in. main being the minimum for the residential sections. The 12-in. mains contemplated for the business section will be fed from the 24-in. main in Walker Ave., and will be laid so that fire hydrants will be available wherever needed. An engineer is now at work preparing the plans for the proposed improvement in the water service. He is preparing figures on the cost of the new mains, as well as the cost of disconnecting the fire hydrants from the small mains and connecting them with the large main.

CROWELL, TEX.—S. B. COLLETT has been awarded contract for constructing a dam for the Crowell Water-Works Co.

DENVER, COLO.—On May 17 the citizens voted to deny the granting of a franchise asked by the Denver Union Water Co. and in favor of the citizens' amendment which provides for a water commission composed of A. Lincoln Fellows, elected for six years, Edwin Van Cise, for four years, and A. C. Anderson, for two years, with power to provide for municipal ownership of a water system either by purchase or construction of a new one. The commission is empowered to offer company $7,000,000, and call for an election next September to vote $8,000,000 of bonds if the company will accept the proposition. If not, the commission can call for an election on an $8,000,000 bond issue which can be used by the commission for the construction of a new system. The last appraisal of the water company's property, made March 20, 1909, was $14,400,000.

ALAMOGORDO, N. MEX.—The Alamogordo Improvement Co. has purchased the water-works system here from the Alamogordo Water-Works Co. and will enlarge and improve the system.

METHOW, WASH.—The Weeks-Pope Investment Co., of Spokane, will soon begin work on the construction of a 6-mile ditch and flume line here with which to water about 400 acres of land. Estimated cost, $15,000.

WENATCHEE, WASH.—The Wenatchee Straford Orchard Co. has been incorporated for $150,000 by Fred. W. Hoffman and others for reclamation purposes and other work.

BELLINGHAM, WASH.—Plans are being drawn by the Acting City Engineer for the extension of the intake into Lake Whatcom, an approximate distance of 800 ft. from its present location.

PORTLAND, ORE.—The City Water Board on May 10 approved the plans of D. D. Clarke, Engr. Water Dept., for the proposed new 30-in. submerged pipe line across the Willamette River at a point near Ross Island. Estimated cost, about $125,000.

The JAHN CONSTRUCTION CO., Seattle, Wash., has been awarded contract for the construction of water mains in 13th and other streets, at $30,182; Grand Ave. and Hancock St. system, at $21,000; Waverleigh Heights system, at $37,000.

COTTAGE GROVE, ORE.—The City Council has entered into a contract with the AMERICAN LIGHT & WATER CO., Kansas City, Mo., for the construction of a water pipe line from Layng Creek to connect with the present water system, a distance of 18½ miles, for a consideration of $100,000, the contractors to accept 5% bonds in payment for their work, but, provided the city can dispose of the bonds now being advertised and pay cash the figure will be reduced to $92,000. It is proposed to begin construction work at this end of the line, and connect with Teeters Creek, ten miles away, in order to serve the city with water while the remainder of the line in the mountains is being completed.

SAN DIEGO, CAL.—The Sweetwater Water Co. awarded contract on May 14 to ARTHUR S. BENT, of Los Angeles, Cal., for increasing the size and strength of the Sweetwater dam back of San Diego. The height of the dam will be raised 15 ft. Estimated cost, $150,000.

LODI, CAL.—See item under Light and Power Plants.

STOCKTON, CAL.—The farmers of the southeastern part of San Joaquin County have decided to issue bonds at once and begin the construction of the dam across the Stanislaus River for converting the water into the main canal, which will be used to water 71,000 acres in the newly formed irrigation district. Part of the district will be supplied with water this summer, and the acreage watered will be greatly increased next season. The entire district will be placed under irrigation by the end of next year.

LEWISTON, IDAHO.—Bids will be received until June 6 by J. R. Lydon, City Clk., for extending the 24-in. intake pipe at the city pumping station 100 ft. into Clearwater River.

BOISE, IDAHO.—E. C. Crocker, Vice-Pres. and Gen. Mgr. Snake River Irrigation Co., Ltd., has announced that the plan has been decided upon for the Castle Butte project, located on the Snake River, 38 miles south of here. Work will be started at once. The plan involves the building of a power-house and dam at a cost of $500,000, with machinery capable of generating 10,000 HP. and irrigating 10,000 acres of fruit land.

BOISE, IDAHO.—Specifications are on file at the office of Engineering News, New York, for the enlargement of the main south side canal, Payette-Boise Irrigation project, Idaho. This work involves the excavation of about 342,000 cu. yds. of material, and the time of the completion of the contract is April 1, 1912. Bids will be received at the office of the Reclamation Service, Boise, until July 8.

CALDWELL, IDAHO.—The contract for installing the new water system was let to the CALDWELL PLUMBING & HEATING CO., at $39,733.

ST. JOHN, N. B.—We are officially advised that the city proposes to construct water extensions. Estimated cost, $38,000. William Murdock is City Engr.

TORONTO, ONT.—The Board of Control on May 25 decided to get plans for an extension of the intake pipe 2,000 ft. beyond its present end and to ask two experts to make a report upon the feasibility, cost and probable results of such extension. C. H. Rust is City Engr.

MEXICO CITY, MEX.—A bill carrying an appropriation of $6,500,000 for public works has just passed Congress. It is provided that the sum of $4,000,000 shall be used for the continuation of the construction work on the new water-works system for this city and that the remaining $2,500,000 shall be devoted to the construction of the new Legislative Palace or Hall of Congress. The excavation for the foundation of this building was started several years ago. It is stated that the work of erecting the building will now be pushed forward as rapidly as possible.

SEWERS.

(denotes that this work is advertised in Engineering News.)*

HYDE PARK, MASS.—Contract for constructing the Rugby District sewer, 4,233 ft. long, has been awarded to A. W. BRYNE, of Boston, at $9,820. Bids were opened on May 16.

FITCHBURG, MASS.—We are officially advised that the city proposes to construct a new trunk sewer. Work will be done under the supervision of M. T. Hogan, Supt. Sewerage. David A. Hartwell is City Engr.

BROOKLYN, N. Y.—Bids were received on the percentage basis as follows on May 25 by Alfred E. Steers, Boro. Pres., for furnishing all labor and materials required for constructing sewers in Malta st., between Wertman Ave. and Fairfield Ave.; in Fairfield Ave., between Malta St. and Van Siclen Ave., and in Van Siclen Ave., between Fairfield Ave. and the 26th Ward disposal work, situated between Fairfield Ave. and Van Dall Ave.: Haggerty & Drummond, 158%; Chester A. Dady, 177%; Donogan Redmond Co., 149%; Thomas C. Carlin, Inc., 144.3%; Merrill-Ruckgaber Co., 50 Church St., New York, 144%; J. H. Holmes, 367 Fulton St., Brooklyn, 174%; Newman & Carey, 144.65%.

BINGHAMTON, N. Y.—GEORGE SERIFINA has secured contract at $6,879, for the construction of the Main St. sewer, and T. B. BIDWELL, at $3,191, for construction of the James St. sewer.

ELMIRA, N. Y.—Bids are asked until 10 a. m., June 6 by O. H. Gardner, City Clk., for the construction of sewers in various streets.

GENEVA, N. Y.—See item under Water Supply-Irrigation.

WESTFIELD, N. J.—Contract for constructing sanitary sewers, bids opened on May 16, has been awarded to JOHN McNABB of Bound Brook, at $9,137.

WILKES-BARRE, PA.—Bids will be received until June 9 by F. H. Gates, City Clk., for furnishing material and extending the Hendler drains, also constructing terra cotta pipe sewers in Barnum Pl. and Wayne Lane.

McKEES ROCKS, PA.—Bids are asked until 7 p. m., June 6, by the Borough Clerk, for the construction of a 6-ft. sewer, 350 ft. long, of concrete or of concrete and brick. George H. McGinness is Boro. Engr.

DUQUESNE, PA.—Bids are asked until noon, June 6, by the Sewer Committee for the construction of a sewer in Erwin St. William E. Reed is Boro. Clk.

WEST HAZELTON, PA.—The Council on May 23 awarded contract for the completion of the abandoned contract for a sewer in Green Ridge to THOMAS A. WILLIAMS, of West Hazelton, at $10,168.

DORMONT, PA.—Bids will be received by William G. Colvin, Secy. Boro. Council, until June 3 for constructing main sanitary sewers and disposal plants for systems Nos. 3 and 4, Nos. 1, 2 and 7 and No. 5. There are approximately 7,190 lin ft. of 15, 12 and 10-in. pipe sewer, 18 manholes, a complete disposal plant, with filtration beds and two septic tanks, without filtration beds. Douglass & McKnight are Boro. Engrs., 1709 Union Bank Bldg., Pittsburg.

DORRANCETON (Wilkes-Barre post-office), PA.—Bids were opened by the Town Council on May 17 for the construction of sanitary sewers and appurtenances from the plans of Smith & Welles, Coal Exchange, Wilkesbarre. Contract has been awarded to R. M. ROSSER, of Kingston, Pa., as follows: 10,660 ft. 8-in. sewer, 12 cts.; 1,720 ft. 10-in. sewer, 20 cts.; 300 ft. 12-in. sewer, 27½ cts.; 380 ft. 15-in. sewer, 37 cts.; 690 ft. 18-in. sewer, 50 cts.; 786 6 × 8-in. specials, 37½ cts.; 68 6 × 10-in., 61 cts.; 12 6 × 12-in., 77 cts.; 14 6 × 15-in., $1.05; 24 6 × 18-in., $1.25; 45 manholes, each, $35; 80 lamp shafts, each, $1.25; 24,000 ft. 6-in. house connections, 24 cts.; 1,548 ft. excavation and backfill, 20½ cts.; 21,403 ft. excavation and backfill, 20 cts. to $2.20. Total, $18,071. Other bids were: William Brown & Co., Duryea, $27,334; Saupp & Drhew, Altoona, $28,302; E. H. Post, Wilkes-Barre, $24,664; D. M. Rosser Engineering & Construction Co., Kingston, $22,032 Stephen Flanaghan & Son, Scranton, $26,801; B. G. Coon Construction Co., Wilkes-Barre, $19,820; Westmoreland Construction Co., Greensburg, $27,098.

PARKERSBURG, W. VA.—Bids are asked until 7.30 p. m., June 3, by the Board of Affairs for the material and labor for the construction of an 8-in. sanitary sewer in Gould Ave. Frank Good is Audr.

SANFORD, N. C.—The city has awarded contract to the EDWARDS CONSTRUCTION CO., Hickory, N. C., for constructing sewer system, consisting of seven miles of pipe sewer 8 to 20 ins. diameter, and concrete settling tank. Gilbert C. White is Engr., Durham, N. C.

JEFFERSON, GA.—See item under Water Supply-Irrigation.

DALTON, GA.—See item under Water Supply-Irrigation.

BELZONA, MISS.—Bids were opened by the Mayor and Board of Aldermen on May 17 for the construction of a system of house sewers, to consist of about three or four miles of 8 and 10-in. pipe sewers, with centrifugal pump and motor from plans of Walter G. Kirkpatrick, of Jackson. Contract has been awarded to the MUNICIPAL ENGINEERING & CONSTRUCTION CO., of Chattanooga, Tenn.

VICKSBURG, MISS.—Bids are asked by the city until June 6 for constructing concrete arch or sewer on Speed St. and laying sewer pipe in Mulberry St. J. J. Hayes is Mayor.

HARTFORD, KY.—The City Council has awarded contract for the construction of the new sewer system to FRANK MAY, of Hartford, at $13,014.

NEW ORLEANS, LA.—B. M. Harrod, of Washington, D. C., and Rudolph Hering, 170 Broadway, New York, have submitted a report to the Sewer and Water Board with reference to sewers, drains and water. Their recommendations are based on the expected sale of the $7,000,000 of Sewerage and Water Board bonds. Other sums to accrue for four or five years will aggregate a total of $8,500,000. The report says that $3,000,000 is reserved for connecting premises with water and sewerage, and therefore the total proposed expenditure of extensions and other improvements is limited to within $5,500,000. The board recommends that intercepting canals be installed from pumping stations 6, 7 and 3, to receive dry weather flow from small storms, this water to be discharged finally by way of station No. 5 to Lake Borgne. Station No. 5 is located on Jordan Ave. and Florida Walk; station No. 6 is near the upper Protection Levee; station No. 7 is at Taylor Ave. and Orleans St., and No. 3 is at Broad and Marigny Sts. Estimated cost for the Napoleon Ave., lined and covered canals, $1,000,000; of canal on Broad St., from pumping station No. 1 to Napoleon Ave., lined and covered, $200,000; of Leonidas and Claiborne, lined and covered, canals, $30,000; of Lowerline to Claiborne, $90,000; of Nashville to Claiborne Aves., $160,000. Various other canals, pumping machinery and other work is estimated and recommended. Estimated cost of this work, $5,485,000.

COLUMBIA, TENN.—Bids are asked by the city until June 15 for the construction of a sewer system.

MIDDLETON, OHIO.—Bids are asked until noon, June 7, by Charles C. Dell Dir. Pub. Serv., for the construction of concrete sewers.

ELYRIA, OHIO.—We are officially advised that the city proposes to construct new sewers. C. M. Theobold is City Engr.

GALION, OHIO.—The Board of Control on May 25 awarded contract to the UNITED STATES CONSTRUCTION CO., of Columbus, Ohio, for the construction of the sanitary sewage disposal plant at $27,196.

LEBANON, OHIO.—Bids will be received by the Village Council, M. E. Guslin, Clk., until June 24 for construction of about 6,900 lin. ft. of sanitary sewers of vitrified tile, 8 and 10-in. pipe.

*PROSPECT, OHIO. — See item under Streets and Roads.

TOLEDO, OHIO.—T. J. KELLEY has been awarded contract at $3,476, for the construction of a sewer from Navarre Ave. to Earl St., between McKinley and Butler Sts., and A. GRZYBOWSKI, at $3,151, for the construction of a sewer in the alley north of Western Ave., and in Corinth St.

MISHAWAKA, IND.—See item under Streets and Roads.

VINCENNES, IND.—We are officially advised that the city proposes to construct a complete system of sewerage. Plans are now being prepared. Joseph V. Hershey is City Engr.

SAULT STE. MARIE, MICH.—We are officially advised that the city proposes to construct sewers. Estimated cost, $30,000. Work will be in charge of J. Bainbridge, Supt. Sewerage. C. McIllhargie is City Engr.

*DELAND, ILL.—Bids will be received by J. B. Rinehart, Clk. Drainage Bd. Comrs., Drainage District No. 4 of the town of Goose Creek, Piatt County, at his office, Deland, until 1 p. m. June 17, for the following work: Furnishing, hauling and laying the following size drain tile: 4,000 ft. 27-in.; 4,000 ft. 24-in.; 3,733 ft. 22-in.; 3,167 ft. 16-in.; 1,000 ft. 14-in., and 700 ft. 12-in.; all tile above 16-in. in diameter to be salt glazed, vitrified, first-class drain tile; all tile 16-in. and smaller to be red shale tile, first-class quality. All the tile to be laid to the grade and depth as shown on the profile, and all trenches to be refilled after the tile are laid; also for the construction of one retaining wall to contain about 10 cu. yds. of concrete. Plans and profile may be seen at the office of W. J. Day, Engr., Bement, Ill., or at the office of the Clerk at Deland.

MOUNT VERNON, ILL.—See item under Streets and Roads.

MARSEILLES, ILL.—Bids will be received until June 6 for the construction of sewers. Estimated cost $27,000. George S. Farnsworth, of Ottawa, is Engr.

MILWAUKEE, WIS.—The Board of Public Works will receive bids until June 3 for new sewers to be laid in Elm and 47th Sts., Burrell St., Pryor Ave.

SIOUX CITY, IOWA.—Bids will be received until June 3 by C. F. Baldwin, City Clk., for furnishing material and constructing a storm sewer in Prospect St.

KNOXVILLE, IOWA.—Bids are asked until June 6 by the city for 4,925 ft. of 8-in. pipe with 4-in. drain tile, 13 manholes, two combined manhole and flushtanks and one flushtank. Halls & Adams are Engrs., Centerville, Iowa.

OELWEIN, IOWA.—We are officially advised that the city proposes to construct sewers. I. F. Hanson is Mayor.

ROCHESTER, MINN.—We are officially advised that the city proposes to construct a storm sewer. Robert Elliott is City Engr.

PARSONS, KAN.—We are officially advised that the city proposes to construct a septic tank. Estimated cost, $20,000. J. M. Guiles is City Engr.

ABILENE, KAN.—Bids will be received until June 9 by J. A. Graves, City Clk., for furnishing material and constructing storm sewers, storm sewer outlet, concrete combined curb and gutter and street paving, approximately 30,000 sq. yds. of either brick, asphalt or patented pavements. Burns & McDonnell are Engrs., Scarritt Bldg., Kansas City, Mo.

TOPEKA, KAN.—Plans for laying a new sewer system are being prepared in the office of the City Engineer under the direction of W. G. Tandy, Comr. Pub. Improvements. The new sewer system will serve the extreme western section of the city from Washburn College to Auburndale, including Elmhurst, Lowman Hill and Melrose additions.

ST. JOHNS, KAN.—MARSHALL BROS., of Las Animas, Colo., have secured contract for constructing the sewer system, bids opened on May 20, at $34,315. Burns & McDonnell, of Kansas City, Mo., are Engrs.

O'NEILL, NEB.—The citizens on May 16 voted to issue bonds for the construction of a sewer system. Estimated cost, $16,000.

YORK, NEB.—All bids opened on May 15 for concrete steel-reinforced sewer, to cost about $20,000, have been rejected. New bids will be received.

GRAND FORKS, N. DAK.—We are officially advised that the city proposes to construct sewers and water improvements.

FRANKLIN, MO.—The Water and Sewer Commissioners on May 23 awarded contract to LOUIS YADISERNIA, of Woonsocket, R. I., for the construction of vitified sewers here at $4,796.

ST. JOSEPH, MO.—J. H. HARTMAN, of St. Joseph, has secured contract for constructing a section of the Blacknake sewer at about $38,000. George F. Barne is Secy. Bd. Pub. Wks.

BADEN, MO.—The Board of Public Improvements on May 20 let the contract for the first section of the Baden public sewer to the HOFFMANN-HOGAN CONSTRUCTION CO., at $280,159.

DE SOTO, MO.—We are officially advised that the city proposes to construct a new sewer. Ward Cunningham is Mayor.

WINDSOR, MO.—See item under Water Supply-Irrigation.

SEARCY, ARK.—The city has decided to postpone the letting of the proposed system of sanitary sewers until the bonds are sold. Bids were to have been opened on May 25. W. S. Shields Engineering Co., 1201 Hartford Bldg., Chicago, Ill., are Engrs.

BRUSH, COLO.—We are officially advised that bids were received on May 23 by the city for the construction of a sanitary sewer. Engineer's estimate, $40,000. The bids follow: P. O'Brien & Son, Denver, Colo., $38,898; Inter-Mountain Bridge & Construction Co., Tecumseh, Neb., $41,798; Thomas McGovern, Denver, $46,307; Seerie Bros., Denver, $40,499; Dillon Stone Co., Denver, $43,213; Vickery & Foster, Denver, $39,323; C. WALKER & SON, North Platte, Neb., $38,741 (awarded contract); George E. Cox, Fort Morgan, Colo., $44,212.

SEATTLE, WASH.—Contracts have been awarded as follows by the Board of Public Works for the construction of sewers: Lakeview Ave. and other streets, sewers, to GEORGE W. WALKER, at $19,388; Third Ave., N. W., and other streets, sewers, to J. RUTHE, at $11,821.

HOOD RIVER, ORE.—The only bid submitted for the construction of sewers has been received from and contract awarded to R. D. GOULD & CO., of Hood River, as follows: 1,950 ft. 8-in. vitrified sewer, some rock at one end, 53 cts.; loose rock excavation, $2.50 per cu. yd.; earth excavation, 65 cts.; Y's, in place, $2 each. W. B. Langille is City Recdr.

LODI, CAL.—See item under Light and Power Plants.

COVINA, CAL.—The City Engineer is preparing plans for the construction of a complete sewer system and disposal plant.

PHOENIX, ARIZ.—We are officially advised that the city will receive bids about July 15 for the construction of a new sewer. Estimated cost, $400,000. O. A. Turney is City Engr.

SALT LAKE CITY, UTAH.—Bids will be received until June 3 by the Board Public Works, H. G. McMillan, Chn., for constructing pipe sewers in sewer extension No. 267.

SYDNEY, N. S.—We are officially advised that bids will be received at once for the construction of sewers. Estimated cost, $22,000. D. M. D. Campbell is City Engr.

MONTREAL, QUE.—Bids are asked by John R. Barlow, City Surv., until noon, June 9, for the construction of a sewer in Labelle St., between Morin St. and Jarry St., and along Jarry St. to St. Hubert St. sewer.

ST. BONIFACE, MAN.—We are officially advised that bids will be asked by the city in about two months for the construction of a new trunk sewer. Estimated cost, 50,000. J. B. Cote is City Clk.

REGINA, SASK.—Bids will be received until June 6 by A. E. Chivers, City Clk., for constructing sewage disposal works. A. J. McPherson is Consulting Engr., Regina.

GARBAGE DISPOSAL.

(denotes that this work is advertised in Engineering News.)*

SARANAC LAKE, N. Y.—The city on May 17 voted to spend $9,000 for the construction of a garbage incinerator.

McKEES ROCKS, PA.—Bids are asked until 7 p. m., June 6, by the Borough Clerk for the collection, removal and disposal of all garbage, offal, etc., for a term of one year. John P. Pastre is Boro. Secy.

SUPERIOR, WIS.—We are officially advised that the city will construct a garbage crematory. E. B. Banks is City Engr.

GRAND FORKS, N. DAK.—The city contemplates the construction of a garbage incinerator.

ABERDEEN, WASH.—The Council plans to build a garbage crematory at a cost of $15,000. Bids have been submitted.

STREETS AND ROADS.

(denotes that this work is advertised in Engineering News.)*

*ROCKPORT, ME.—We are officially advised that no bids were received by Paul D. Sargent, State Comr. of Highways, Augusta, Me., on May 24, for constructing 5.4 miles of state road in the city of Rockland and town of Rockport.

CONCORD, N. H.—Bids are asked by H. C. Hill, State Engr., Concord, until 1 p. m., June 10, for grading and resurfacing 3,000 lin. ft. of road in Hanover.

SOMERSWORTH, N. H.—Bids are being received, we are advised, for road work including macadamizing, to cost $12,000. The work will be under the direction of H. C. Hill, State Engr., Concord, N. H.

HARTFORD, CONN.—Bids will be received by the State Highway Commissioner, Capitol, Hartford, until 2 p. m., June 14, for state road work, as follows:

Town of Clinton, 16,016 lin. ft. graded road on the Killingworth Turnpike, including two 12-in., three 20-in., one 24-in., five 15-in., and one 18-in. tile culverts, and four reinforced-concrete arch culverts. Plans and specifications with Z. Silas Wellman, First Selectman.

Town of Killingworth, 11,485 lin. ft. graded road on the Killingworth Turnpike, including five 24-in., two 20-in. and one 15-in. tile culverts and two reinforced-concrete slab culverts. Plans and specifications with Jos. Adametz, Jr., First Selectman.

Town of Meriden, 5,738 lin. ft. macadam on West Main St., including five 12-in., and one 18-in. tile culverts. Plans and specifications at Selectmen's office, Town Hall.

Town of Salem, 5,130 lin. ft. gravel road on the Colchester and New London Turnpike, including one 24-in., two 15-in., two 18-in., and one 20-in. tile culverts. Plans and specifications at Town Clerk's office, Colchester, Conn.

Town of Colchester, two sections gravel road aggregating 5,758 lin. ft. on the Colchester and New London Turnpike, including four 12-in., and five 15-in. tile culverts. Plans and specifications at Town Clerk's office, Colchester.

Town of Ledyard, 5,150 lin. ft. gravel road, including two 15-in., one 18-in., and one 12-in. tile culverts and one concrete arch culvert, on the River Road. Plans and specifications with Luther C. Gray, First Selectman, Ledyard.

Town of Putnam, 4,700 lin. ft. macadam, on the Dayville-Putnam road, including two 15-in., three 18-in., one 24-in. and one 20-in. tile culverts. Plans and specifications at Town Clerk's office, Putnam.

Town of Coventry, 10,000 lin. ft. gravel on the Willimantic-Coventry turnpike, including a reinforced concrete arch culvert. Plans and specifications at Town Clerk's office, South Coventry.

WATERBURY, CONN.—Bids will be received by the Board of Public Works until 8 p. m., June 7, for grading Jefferson St. Plans and specifications at office of Robert A. Cairns, City Engr., 9 Leavenworth St.

*ALBANY, N. Y.—The bids received by the State Highway Commission on May 27 for the construction of State and county highways were:

Altamont Village County Highway No. 849, Albany County, length, 1.10 miles: (On Bermudez), DELAWARE CONSTRUCTION CO., Sidney, N. Y., $25,000 (awarded contract); Ryan & Yale, Brewsters, N. Y., $26,070.

Olean-Hinsdale State Highway No. 5066, Part 1, Cattaraugus County, length, 2.94 miles: (On Residuum products), FRANK L. COHEN, 49 Niagara St., Buffalo, N. Y., $34,900 (awarded contract); William McIntyre & son, Sharon, Pa., $41,612; F. V. E. Bardol, Buffalo, N. Y., $38,000.

Falconer Village State Highway No. 5067, Chautauqua County, 1.06 miles: S. T. BENSON & CO., Falconer, N. Y., $44,753 (awarded contract on brick); William McIntyre & Son, Sharon, Pa., $46,447; Thomas Mahoney, Jamestown, N. Y., $47,493; F. V. E. Bardol, Buffalo, N. Y., $50,000; Thomas Fitzgerald Co., Fredonia, N. Y., $47,000.

Norwich Village State Highway, No. 5057, Chenango County, 0.51 mile: CREEDON & PITOU, New York, $10,300 (awarded contract); Newport Construction Co., Newport, N. Y., $10,400; Albert Gaffney, Syracuse, N. Y., $11,000.

Keeseville-Ausable Chasm State Highway No. 5056, Clinton County, 2.28 miles: SHERRILL HARDWARE & PLUMBING CO., Hudson Falls, N. Y., $22,860 (awarded contract on Bermudez); Delaware Construction Co., Sidney, N. Y., $27,200; Brown & Lowe, Schenectady, N. Y., $30,913; C. R. Cunningham, Plattsburgh, N. Y., $26,974; F. V. E. Bardol, Buffalo, N. Y., $26,300; John B. Dower, Ballston, N. Y., $23,600.

Keeseville Village County Highway No 850, Clinto and Essex Counties, 1.24 miles: JOHN DOWER, Ballston, N. Y., $15,750 (awar contract on Bermudez); J. J. Cunningh Plattsburg, N. Y., $18,267; Sherrill H ware & Plumbing Co., Hudson Falls, N. Y. 6,190; Brown & Lowe, Schenectady, N. Y. 21,756; F. V. E. Bardol, Buffalo, $19,50

Hom Village State Highway No. 5058, Cortla County, 2.01 miles: Mulderry Bros., Albany N. Y., $46,680; C. Aikenhead Co., Roch r, N. Y., $52,900; E. D. Baker, Bingh ton, N. Y., $51,817; F. V. E. Bardol. falo, N. Y., $51,000; Delaware Construct Co., Sidney, N. Y., $52,000; Central City ving Co., Syracuse, N. Y., $50,560; Charl C. Hookway, Syracuse, N. Y., $49,000; P. Hull, Cortland, N. Y. (informal bid); lbert Gaffney, Syracuse, N. Y., $49,000. award announced.

Cor d-Truxton County Highway No. 738, Part Cortland County, 6.51 miles: THOM S O'HERN, Radford Bldg., Yonkers, N. Y. 63,849 (awarded contract on Bermudez) reedon & Pitou, New York, $75,842; E. D. Baker, Binghamton, N. Y., $70,518; Chamb rs & Grady, Rochester, N. Y., $71,329; sier & Summers, Buffalo, N. Y., $73,300; laware Construction Co., Sidney, N. Y., $74,500; F. A. Brotsch, Jr., Rochester, N. Y. 71,000; Central City Paving Co., Syracuse, N. Y., $69,043; F. V. E. Bardol, Buffalo, Y., $72,300; Albert Gaffney, Syracuse, Y., $71,000.

Delaware River County Highway No. 145-R, Cortland County, 1 mile: CREEDON & PITOU, New York, $9,896 (awarded contract on residuum).

State Farm County Highway No. 525-A, Erie County, .59 mile: STANDING CONSTRUCTION CO., Collins, N. Y., $5,977 (awarded contract).

Hamburg Village County Highway No. 862, Erie County, .97 mile: HERLY & LYNE, Fredonia, N. Y., $47,500 (awarded contract).

Blaisdell Village County Highway No. 863, Erie County, 1.06 miles: F. V. E. BARDOL, D. S. Morgan Bldg., Buffalo, N. Y., $21,000 (awarded contract).

Aurora-Glenwood County Highway No. 751, Sec. 2, Erie County, 7.07 miles: F. V. BROTSCH CO., Rochester, N. Y., $94,000 (awarded contract on Bermudez).

Northville Village North State Highway No. 5065, Fulton County, 2.43 miles: DELAWARE CONSTRUCTION CO., Sidney, N. Y., $39,900 (awarded contract).

Herkimer Village State Highway No. 5060, Herkimer County, .77 mile. All bids held.

Middleville Village-Newport Village State Highway No. 5064, Herkimer County, 1.57 miles: NEWPORT CONSTRUCTION CO., Newport, N. Y., $16,900 (awarded contract on residuum).

Fultonville Village-Fonda Village, County Highway No. 864, Montgomery County, .90 mile: MOHAWK ENGINEERING & CONSTRUCTION CO., Schenectady, N. Y., $19,026 (awarded contract on Bermudez).

Niagara Falls-Buffalo State Highway No. 5063, Part 1, Niagara County, 2.50 miles: LOUIS H. GIPP CO., Buffalo, $54,800 (awarded contract).

Whitesboro Village State Highway No. 5059, Oneida County, 1.60 miles: WARREN BROS. CO., 59 Temple Pl., Boston, Mass., $64,511 (awarded contract on bithulithic).

Scott's Corners-Burnside County Highway No. 414, Orange County, 1.60 miles: ORANGE COUNTY ROAD CONSTRUCTION CO., Chester, N. Y., $26,500 (awarded contract).

Oak Orchard County Highway No. 393, Part 2, 3.61 miles: FRED H. RHOADY and FRANK S. TYLER, Albion, N. Y., $29,959 (awarded contract on residuum).

Ballston Spa-Ballston Lake State Highway No. 5062, Saratoga County, 2.74 miles. All bids held.

Malta-Saratoga County Highway No. 611, Saratoga County, 6.64 miles: CORLEAR CONSTRUCTION CO., Schenectady, $78,690 (awarded contract on residuum).

Lake George Village County Highway No. 843, Warren County, .17 mile: C. J. REARDON, Glens Falls, N. Y., $2,127 (awarded contract on Bermudez).

Lake George Village State Highway No. 5068, Warren County, 1.48 miles: C. J. REARDON, Glens Falls, N. Y., $24,202 (awarded contract on residuum).

Clyde Resort County Highway No. 860, Wayne County, 3.48 miles: LUDDINGTON & ROBERTS, Rochester, $18,498 (awarded contract).

Dugway County Highway No. 861, Part 4, Wayne County, .98 mile: TOWN BOARD OF WALWORTH, Wayne County, $11,900 (awarded contract).

Mt. Kisco Village County Highway No. 865, Westchester County, 3.01 miles; DUNBAR CONTRACTING CO., New York, $78,000 (awarded contract on residuum). S. Percy Hooker is Chn. of Comn., 53 Lancaster St., Albany, N. Y.

NEW YORK, N. Y.—Bids are asked by Calvin Tompkins, Comr. of Docks and Ferries, until noon, June 8, for repairing the asphalt pavement along the North, East and Harlem Rivers, and all work incidental thereto.

The following bids were received on May 26 by the President of the Borough of The Bronx for repaving with asphalt blocks on the present concrete foundation the roadway of Brook Ave., from Webster Ave. to Wendover Ave., and setting curb where necessary: Barber Asphalt Paving Co., 30 Church St., $29,978; Hastings Paving Co., 25 Broad St., $28,475.

NEW YORK, N. Y.—The following bids were received on May 25 by the President of the Borough of Brooklyn for regulating and paving with asphalt pavement on a concrete foundation the roadway on 40th St., from Sixth Ave. to New Utrecht Ave.: Cranford Co., 52 Ninth St., Brooklyn, $13,764; Barber Asphalt Paving Co., 30 Church St., New York, $15,115; Uvalde Asphalt Paving Co., 1 Broadway, New York, $14,321; Brooklyn Alcatraz Paving Co., $14,284. Also, for regulating and paving with asphalt pavement on a concrete foundation the roadway of 42d St., from Seventh Ave. to New Utrecht Ave.. Cranford Co., $12,174; Barber Asphalt Paving Co., $13,940; Uvalde Asphalt Paving Co., $12,969; Brooklyn Alcatraz Paving Co., 407 Hamilton Ave., **Brooklyn, $12,985.**

NEW YORK, N. Y.—Bids are asked by Alfred E. Steers, Pres. Boro. of Brooklyn, until 11 a. m., June 15, for furnishing and delivering 1,000 net tons of limestone or other suitable inorganic dust, to be delivered at the yard of the municipal asphalt plant, Seventh St. Basin, Gowanus Canal, Brooklyn.

*PLATTSBURG, N. Y.—Bids are asked until 7 p. m., June 6, by the Board of Public Works, for the improvement of Margaret St. northerly from Cornelia St. towards the Delaware & Hudson Co.'s tracks. This work includes approximately 7,600 sq. yds. of concrete pavement and 4,500 lin. ft. of concrete curb. C. A. Barnard is City Clerk.

ROME, N. Y.—At the meeting of the Board of Public Works held on May 23, the bids of WARREN BROS. CO., 59 Temple Pl., Boston, Mass., at $23,075, for paving Floyd Ave., from Stanwix St. to the corporation tax line, and Stanwix St., from James St. to Floyd Ave., for $8,243, were accepted and were ordered sent to the Common Council for approval. The bids are for Warren Bros.' bithulithic pavement on a 4-in. concrete base. This company is the lowest bidder, and their bids are below the estimate, that for Floyd Ave. being $24,169 and for Stanwix St., $8,600. Advertisement was ordered for paving East Willett St., from James to Spring Sts., and for Elm St., from George to Madison Sts., and John L. Plunkett, City Engr., was directed to prepare plans and specifications for the several kinds of pavement; also for Kossuth St., from Embargo to Dominick Sts., and Elm St., between George and Madison Sts., the latter two streets to be improved next year.

PATERSON, N. J.—Bids are asked until June 7 by the City Council for asphalt paving in Paterson. We are officially advised that there will be about 36,000 sq. yds. of paving, which will cost approximately $95,000. H. J. Harder is City Engr.; John Y. Brett is City Street Comr.

BEAVER, PA.—We are officially advised that the following bids were received on May 25 by Joseph W. Hunter, State Highway Comr., for road work here: John F. Howley & Co., 237 Fourth Ave., Pittsburg, native stone bottom, $17,316, Wampum limestone top; $26,859, brick top; $25,154, bit-macadam, top machine mixed; $24,540, concrete macadam top. The Standard Bitulithic Co., 253 Broadway, New York, local stone bottom, $23,297, bit-macadam top. R. D. Hunter, Beaver, Pa., local stone bottom, $16,789, Wampum limestone top; $23,298, brick top; $20,878, bit-macadam or hand mixed; $19,038, bit-macadam, penetration method; $22,718, concrete macadam top. Rhinehart Bros., East Liverpool, Ohio, local stone bottom, $23,940, wire cut brick top. J. T. McGuire & Co., New Brighton, Pa., local stone bottom, $15,858, Lowellville limestone top; $27,512, bit-macadam, machine or hand mixed; $26,899, bit-macadam, penetration method; $26,049, concrete macadam top; $23,344, brick top. Ridge Bros. & Co., 407 Fourth Ave., Pittsburg, native stone bottom, $14,724. Lawrence or Beave County limestone top; $22,388, acceptable brick top; $20,176, bit-macadam, machine or hand mixed; $18,849, bit-macadam, penetration method; $20,176, concrete macadam top.

DUNMORE, PA.—We are officially informed that in about a month $50,000 of paving will be done in this city. M. P. Mitchell is City Engr.; Thomas Allison is Supt. of Streets.

PARNASSUS, PA.—Bids are asked by the Borough of Parnassus until 8 p. m., June 7, for furnishing and setting about 2,000 ft. of stone curbing. F. R. Alter is Boro. Secy.

HARRISVILLE, PA.—Bids will be received until 2 p. m., June 8, by Joseph W. Hunter, State Highway Comr., Harrisburg, Pa., for the construction of 4,637 ft. of road, extending from the Mercer Township line on Mercer St. to the Mercer Township line on Franklin St., in Harrisville Boro., in the County of Butler.

LANSDOWNE, PA.—The UNITED PAVING CO., of Atlantic City, N. J., has been awarded a contract for laying bitulithic pavement on Baltimore Ave. in the Borough of Lansdowne, in Delaware County, a few miles from Philadelphia. This contract amounts to about $60,000.

WILMINGTON, DEL.—We are officially advised that the following bids were received by Francis A. Price, Newcastle County State Highway Comr., Church Bldg., Wilmington, on May 24 for macadam roads in Newcastle County:

State Road from Kent County two miles northward, Horrigan Contracting Co., granite, $16,433; Birdsboro, $16,222; amiesite top, $23,755; tar binder, $22,335; limestone, $16,151. John A. Clark, same road, laxley, $15,255; granite, $15,720; Birdsboro, $15,477; amiesite, $23,337; asphaltum, $19,847; tar binder, $20,552; limestone, $16,100. B. F. Wickersham, same road, macadam, $15,318; amiesite, $25,590; asphalt, $24,470; tar binder, $24,470; limestone, $14,614. STEWART & DONOHUE, Wilmington, same road, granite, $13,153 (awarded contract); amiesite, $18,896; asphalt, $21,520; tar binder, $21,552; limestone, $13,747; Birdsboro, $13,914. Juniata Paving Co., same road, asphaltum, $17,368; limestone, $15,959.

Boyd's Corner to Port Penn, Horrigan Contracting Co., macadam, $13,825; Birdsboro, $13,709; Amiesite, $19,705; asphaltum, $16,477; tar binder, $16,477; limestone, $13,479. John A. Clark, same road, macadam, $12,880; Birdsboro, $13,050; amiesite, $19,350; tar binder, $17,100; limestone, $13,700. STEWART & DONOHUE, Wilmington (awarded contract), same road, granite, $10,535; amiesite, $14,411; asphaltum, $15,586; tar binder, $15,588; limestone, $11,112. Commonwealth Construction Co., same road, macadam, $13,702; asphaltum, $20,966; tar binder, $20,966.

Mount Pleasant to Maryland line, Horrigan Contracting Co., granite macadam, $23,050; Birdsboro, $32,557; amiesite, $49,541; limestone, $29,618; tar binder, $41,456; Juniata Paving Co., same road, macadam, $29,011; asphaltum, $37,448; limestone, $34,015. John A. Clark, same road, macadam, $28,143; Birdsboro, $28,578; limestone, $30,143; tar binder, $38,466. STEWART & DONOHUE, Wilmington (awarded contract), same road, macadam, $25,948; amiesite, $35,265; asphaltum, $38,671; tar binder, $38,671; limestone, $27,015.

Naaman's Creek Road, John F. O'Neill, granite-macadam, $25,990. Corkran Construction Co., same road, macadam, $20,108; asphaltum, $33,608; tar binder, $33,608. Horrigan Construction Co., same road, macadam, $28,559; asphaltum, $38,532; tar binder, $42,600. Stewart & Donohue, same road, macadam, $28,090; limestone, $26,580. COMMONWEALTH CONSTRUCTION CO., Times Bldg., New York, same road, macadam, $21,969 (awarded contract); asphaltum, $27,430; tar binder, $27,430.

NEWARK, DEL.—Bids are asked until 8 p. m., June 6, by D. C. Rose, Chn. Street Com., for constructing about 2,000 ft. of concrete curb and gutter.

ARLINGTON, VA.—We are officially advised that bids were received on May 10, by Capt. H. L. Pettus, Q. M., Depot Quartermaster's Office, Washington, D. C., for Tarvia on roadway in Arlington National Cemetery. The contract has been awarded to R. E. BOISEAU, 1219 Wisconsin Ave., N. W., Washington, D. C.

BENWOOD, W. VA.—Bids are asked until 7 p. m., June 13, by Paul A. Dechan, City Clerk, for furnishing and setting about 7,000 ft. of curb along the east side of Marshall from Ninth St. to McMechen Run. C. C. Smith is City Engr., Reilly Bldg., Wheeling W. Va.

WILMINGTON, N. C.—See item under Water-Supply—Irrigation.

GREENVILLE, S. C.—The City Commission, we are informed, will advertise for a quantity of street paving, this season. C. P. Ballenger is City Engr.

DALTON, GA.—See item under Water-Supply—Irrigation.

SELMA, ALA.—We are officially advised that paving on Broad St. will be done immediately, at a cost of $38,000. The work will be done under the supervision of V. B. Atkins, Mayor, and Julien Smith, City Engr.

HUNTSVILLE, ALA.—It is the intention, we are officially informed, to construct street paving here, to the amount of $40,000. Mitchell Carter is City Engr.; Frank E. Murphy is Supt. of Streets.

The City Council has awarded a contract for paving Church St. to the BLOAM BLOCK PAVING CO. The paving will extend from Holmes St. to a point beyond the Alabama Cotton Oil Mills and the work will cost about $40,000.

*JACKSON, MISS.—Bids will be received by the Mayor and Board of Aldermen, of Jackson, Miss., at the City Hall, until 3 p. m., June 7, for the construction of approximately 39,000 sq. yds. of paving. Bids are desired on brick, concrete, wood block, bitulithic and mineral rubber; also 10,000 lin. ft. of curb. B. L. Klyce is City Engr.

MAYSVILLE, KY.—We are officially informed that bids will be received about June 10 for paving various streets with brick. James Walker is City Engr.

*PROSPECT, OHIO.—Bids are asked by the Village Council until noon, June 8, for paving with brick or asphalt block, Water and Main Sts., from Corporation Line to Corporation Line, in all about 25,000 sq. yds. Also for furnishing material and constructing about 6,500 lin. ft. of 12, 15 and 24-in. sewer. Tom Finefrock is Clerk; J. C. Kennedy, of Marysville, Ohio, is Consult. Engr.

DELAWARE, OHIO.—Bids are asked by W. F. Whittier, Surv. of Delaware County, until (a) noon, June 11, (b) 1 p. m., (c) 2 p. m., and (d) 3 p. m., the same day, for constructing (a) the Cherry St. Extension Road, 1,100 ft.; (b) the C. C. Wright Road, .97 mile; (c) the Steckel Road, 1.394 miles long and (d) the Moss Road, .46 miles long, respectively. The work consists of grading, draining and macadamizing.

Bids are asked until 2 p. m., June 18, by W. F. Whittier, County Surv., for improving the Berkshire North Road, 4.7525 miles, by draining, grading and macadamizing.

We are officially advised that the following contracts for road work were awarded on May 21: Dulin-Houseworth Road to BRADY, O'CONNELL & MOLLOY, of Marion, Ohio, for $3,000; estimate, $3,011. Sherwood Road to J. W. SCOTT, Marion, Ohio, for $5,375; estimate, $5,405; Wheeler Road to BRADY, O'CONNELL & MOLLOY, Marion, Ohio, for $4,745; estimate, $4,754. Whipple Road to RICHEY & JACKSON, Delaware, Ohio, Route 6, for $7,440; estimate, $7,461. The Dulin-Houseworth Road is in Oxford Township; the Whipple and Sherwood Roads are both in Oxford and Troy Townships; and the Wheeler in Brown and Oxford Townships, all Delaware County.

TROY, OHIO.—John McClain, Mayor, informs us that paving a portion of West Main St. is under consideration. H. J. Walker is City Engr.

CLEVELAND HEIGHTS (Cleveland post-office), OHIO.—Bids are asked by H. H. Canfield, Clerk of the Village of Cleveland Heights, Ohio, at his office at the Town Hall in said Village, or at his office at 309 Beckman Bldg., Cleveland, Ohio, until June 14, for furnishing the material and labor necessary for the improvement of North Woodland Road from Rice Ave. easterly to Fairmount Boulevard by constructing a sidewalk on either side of said road.

CIRCLEVILLE, OHIO.—Court St. will be paved this fall and we are officially informed that the cost will be about $90,000. O. W. Stiles is City Engr.; J. W. Lowe is Dir. Pub. Service.

EAST YOUNGSTOWN (Youngstown post-office), OHIO.—Bids will be received by the Council of the Village of East Youngstown, Ohio, Mahoning County, until 7 p. m., June 13, at the office of P. J. Carney, Jr., Village Clerk, in East Youngstown, Ohio, for furnishing the necessary labor and material to grade and improve Fairview Ave. from Broad St. to the Coitsville Road in said Village.

ELYRIA, OHIO.—It is the intention, we are informed, that there is to be a quantity of street paving to be done this season. C. M. Theobald is City Engr.; Martin Mueller is Supt. of Streets. A list of bids for certain street work was published on May 19.

AKRON, OHIO.—Following is a list of the lowest bidders on the streets to be paved, bids for which were received on May 20: Spicer St., Matthew McCourt, with stone curbing, $11,120; cement curbing, $10,857; combined curbing and gutter, $11,651. Howe St., Matthew McCourt, stone curb, $12,992; cement curbing, $11,622; combined curb and gutter, $12,836. Getz St., E. McShaffrey & Son, stone curb, $6,958; cement curbing, $6,556; combined curb and gutter, $7,151. Lake St., P. T. McCourt, stone curb, $17,067; cement curbing, $16,293; combined curb and gutter, $17,108. Campbell St., P. T. McCourt, stone curb, $9,733; cement curb, $9,537; combined curb and gutter, $9,738. Douglas St., Wildes & Davidson, stone curb, $15,217; cement curb, $14,357; combined curb and gutter, $14,330. Howard St., from Cuyahoga Falls Ave. to North Corporation Line, Wildes & Davidson, stone curb, $6,112; cement curb, $5,752; combined curb and gutter, $6,039. Gale St., McShaffrey & Sons, stone curb, $7,587; cement curb, $6,945; combined curb and gutter, $7,666. Because of irregularities the Balch St. paving will be readvertised.

GREENVILLE, OHIO.—This city has certain paving work under consideration, we are advised, but as yet nothing definite has been arranged. L. N. Jackson is City Engr.

CINCINNATI, OHIO.—We are officially advised that bids were received by the Board of County Commissioners May 20 for Specification No. 23, for improvement of the Biddinger Pike, from Harrison to Butler County line, in Harrison Township. The contract has been let to NUGENT & HINES, of Harrison, Ohio, at $13,284. Fred Driehs is Clerk.

BEDFORD, IND.—The City Council has ordered plans and specifications for paving a number of streets. Bids will be received for vitrified brick, bitulithic pavement, creosote blocks and sheet asphalt.

INDIANAPOLIS, IND.—The Board of Public Works has passed resolutions for grading and paving the sidewalks with cement to a uniform width of five feet: portions of Julian Ave., Gray St., Tenth St., Meridian St., Palmer St., Minnesota St., Norwood St., Rose St., Rawls Ave., Audubon Road, Arlington Ave., Tacoma Ave., St. Clair St., Gale St., Washington St., New York St. and the east and west side of the Belt railroad. Bids will be advertised for June 8.

MISHAWAKA, IND.—The city will undertake paving and sewer work during the season, we are officially informed. James W. Haverly is City Engr.

JEFFERSONVILLE, IND.—We are officially advised that bids were received on May 23, by the Commissioners of Clark County, at Jeffersonville, Ind., for the construction of a gravel road. Peter Nachand, County Audr. The contract has been let to the W. O. SWEENEY CO., Jeffersonville.

BRAZIL, IND.—Bids are asked until 7.30 p. m., June 30, by the Common Council for the construction of a cement sidewalk on either side of East National Ave., from Ashley St. to west line of the Carbon Road. Jacob Prevett is City Clerk.

VALPARAISO, IND.—Bids are asked until June 24 for constructing cement sidewalks. We are advised that the cost will be about $5,000. Guy Stenchfield is City Engr.; A. Labruque is Supt. of Streets.

VALPARAISO, IND.—Bids were received by the Board of Public Works on May 27 for constructing 41 blocks of cement sidewalks. G. F. Stinchfield is City Engr. C. H. Heim is Clerk. We are officially advised that the contract has been let to HENRY JUNGJOHAN, of Valparaiso.

KALAMAZOO, MICH.—See item under Water Supply-Irrigation.

TRAVERSE CITY, MICH.—We are officially advised that a quantity of street paving is to be done in Traverse City. E. Wilhelm is Mayor. T. Gillis is City Clerk.

SAULT STE. MARIE, MICH.—We are officially informed that bids will be received about June 15 for paving, to cost about $15,000. C. McIllhargie is City Engr.; P. Brody is Supt. of Paving.

DANVILLE, ILL.—The City of Danville will pave several streets and will build various small bridges. We are officially advised that the work will be in charge of Walter Winn, City Engr.

SPRINGFIELD, ILL.—HENRY NELCH & SON have been awarded the contract for the paving of 15th St., from Monroe to Laurel St. It is estimated that the improvement will cost $50,000. There were four other bidders: John Pretz, Richard Egan, John Striffler and the Illinois Concrete Construction Co. The figures submitted by Nelch & Son were $1.52½ per sq. yd. for brick paving and 49¾ cts. a lin. ft. for sandstone curbing.

MOUNT VERNON, ILL.—A mile of paving and sewer work and a septic tank, to cost $30,000, will be constructed in about a month, we are informed. B. C. Wells is City Engr.

PANA, ILL.—We are officially informed that the contract for 14,000 sq. yds. of brick paving has been awarded to JOHN CHERRY, of Jacksonville, Ill. L. S. Ham is City Engr.

OTTAWA, ILL.—Contracts will be let soon, we are advised, for street paving, to cost $80,000. W. H. Irvin is City Engr.

MONMOUTH, ILL.—We are informed that in about a month contracts will be let for two blocks of vitrified block paving on concrete base, to cost approximately $12,000. John S. Bates is City Engr.

BLOOMINGTON, ILL.—We are officially advised that bids were received by the Board of Local Improvements on May 26 for paving (a) 4,755 sq. yds. of asphalt, (b) 5,934 sq. yds. of brick pavement. Elmer Folsom is City Engr. The following contracts have been let: (a) ANDREWS ASPHALT PAVING CO., of Hamilton, Ohio, at $7,029; (b) I. D. LAIN, Bloomington, Ill., at $10,978.

SUPERIOR, WIS.—Contracts are being let, we are advised, for street work to be done this summer. E. B. Banks is City Engr.

WAUSAU, WIS.—We are officially advised that the contract for paving, to cost $25,000, will be let soon. B. C. Gowan is City Engr.; R. R. Schmidt is Street Supt.

OTTUMWA, IOWA.—We are officially advised that no bids were received by H. C. Williams, Chn. Street Com., on May 26, for paving and curbing various streets in Ottumwa.

*MARSHALLTOWN, IOWA.—Bids will be received at the office of City Clerk until 8 p. m., June 20, for paving certain streets and alleys. Work comprises approximately 45,600 sq. yds. of cement pavement, 24,300 lin. ft. of concrete curb, 12,700 sq. yds. of brick block pavement, and 4,800 lin. ft. of concrete curb.

ROCHESTER, MINN.—The City Council has decided, we are advised, to pave certain streets in Rochester. Robert Elliott is City Engr.

CROOKSTON, MINN.—In June, we are informed, contracts will be let for paving certain streets in this city. A. J. McKinnon is Mayor; A. M. Childs is City Clerk.

WINONA, MINN.—The city will construct street pavements at some time through the summer, under the supervision of H. B. Walling, City Engr.

ABILENE, KAN.—See item under Sewers.

FORT LEAVENWORTH, KAN.—Bids are asked until 11 a. m., June 7, by Capt. William D. Davis, Q. M., for furnishing and delivering, f. o. b. cars, freight prepaid, at Fort Leavenworth, Kan., one 5-ton road roller and for offers of purchase of a 7-ton road roller from the government.

*HASTINGS, NEB.—Bids are asked by A. T. Bratton, City Clerk, until 5 p. m., June 13, to construct required paving and curbing in Paving District No. 9, from the east side of Burlington Ave. to the west side of Briggs Ave.

GRAND FORKS, N. DAK.—We are officially advised that street paving will be done in Grand Forks this season. H. G. Lykken is City Engr.

ST. LOUIS, MO.—Bids are asked by the Board of Public Improvements, until noon, June 14, for improvements on various streets and alleys in this city. W. B. Dryden is Secy.

*CAPE GIRARDEAU, MO.—Bids are asked by C. F. Betten, City Clerk, until 7.30 p. m., June 6, for grading, curbing and paving with creosoted wood blocks and vitrified brick, Broadway St., between Middle and Pacific Sts.

PARIS, TEX.—Three streets in Paris are to be paved at a cost of $85,000, we are advised. Edward H. McCuistain is Mayor; J. W. Crook is City Engr.

GREENVILLE, TEX.—This city has voted to issue $100,000 of bonds for street paving. In addition to this amount the property owners will expend $200,000 for street paving and $80,000 for concrete sidewalks.

OKLAHOMA CITY, OKLA.—We are officially advised that bids were received on May 16 by Bob Parman, City Clerk, for paving various streets in Oklahoma City. The contract for asphalt has been let to the BARBER ASPHALT PAVING CO., and for brick to R. R. FULLER. W. C. Burke is City Engr.

SEATTLE, WASH.—The following bids were received on May 20 by the Board of Public Works for paving Federal Ave., etc., with (a) sandstone, (b) granite: Independent Asphalt Paving Co., Third Ave. and Cherry St., Seattle, (a) $158,689, (b) $159,929; F. McLELLAN, Burke Bldg., Seattle (a) $158,217 (awarded contract), (b) $159,209; Barber Asphalt Paving Co., White Bldg., Seattle, (a) $166,123, (b) $168,395; P. J. McHugh, Seattle, (a) $169,370, (b) $170,610.

R. H. Thomson, City Engr., has reported the estimated cost of the following street improvements: Ninth Ave., asphalt paving, $11,700; Howell St., asphalt paving, $44,000; Latona Ave., grading, $8,000; Washington St., grading, $3,500; Woodland Park Ave., grading, $12,000; Greenwood Ave., concrete walks, $9,500; 22d Ave., water main, $4,750.

The Board of Public Works has awarded the following contract for street improvements: Westlake Ave., asphalt paving, to BARBER ASPHALT PAVING CO., at $62,769; Corliss Ave., grading and concrete walks, to J. T. DONALDSON & CO., at $10,333.

SAN DIEGO, CAL.—The City Council has ordered the construction of cement sidewalks and curbs on Georgia, Ivy and 26th Sts. J. T. Butler is City Clerk.

CORONA, CAL.—The NEWTON CONSTRUCTION CO. has secured the contract for improving Main, Olive and Kendall Sts., at $12,000.

LONG BEACH, CAL.—The City Engineer has completed plans and specifications for grading and graveling Seaside Boulevard and the construction of other necessary improvements. Estimated cost, $107,000.

WHIPPLE BARRACKS (Prescott post-office), ARIZ.—Bids are asked by Lieut. G. G. Bartlett, Const. Q. M., until 3 p. m., June 4, for furnishing labor and material required for the construction of roads, concrete curbing, gutters and walks at Whipple Barracks, Ariz.

OGDEN, UTAH.—We are officially advised that within 30 days contracts will be let for asphalt paving, to cost $200,000. The work will be under the supervision of William Bostaph, City Engr.

ST. JOHN, N. B.—The City of St. John intends to expend about $70,000 for paving, we are informed. William Murdoch is City Engr.

OSHAWA, ONT.—We are officially advised that contracts will be let soon for two miles of macadam pavement, to cost $75,000. The work will be done under the supervision of W. E. N. Sinclair, Mayor, and F. Chappell, City Engr.

MEXICO CITY, MEX.—The National Congress has approved a contract entered into between the Municipal Government and the COMPANIA BANCARIA DE FOMENTO Y BIENES RAICES and the COMPANIA MEXICANA DE PAVIMENTOS DE ASFALTO Y CONSTRUCTIONES, both of Mexico City, for paving 250 blocks. Each of the two contracting companies are given 125 blocks to pave. They are to receive $2 per square meter upon completion of the work, the balance being divided into ten equal parts, to be paid annually. The contract gives the city the right to extend the guarantee for a period of another five years upon the payment of 25 cts. per square meter addition. The asphalt to be used in the construction of this pavement will be the native product.

MANUFACTURING PLANTS.

(denotes that this work is advertised in Engineering News.)*

PHILLIPS, ME.—Ground will be broken June 1 for a toothpick mill near the spool mill of the International Mfg. Co., which will operate the new enterprise.

FORT STARK (Portsmouth post-office), N. H.—Bids are asked by the Constructing Q. M., Fort Constitution, N. H., until 2 p. m., June 7, for constructing an ordnance shop at Fort Stark.

LEOMINSTER, MASS.—Charles H. Blanchard and Fred C. England of Worcester have formed the firm of Blanchard, England & Co. The firm will build a new comb factory and employ about 200 hands.

LOWELL, MASS.—The erection of additions to Mills Nos. 1 and 2 of the Tremont & Suffolk Mills is planned. They will be of brick and concrete construction, 21 × 20 ft., one story high.

NORTH ADAMS, MASS.—It was announced that the Strong-Hewat Co., of Briggsville, woolen manufacturers, are to begin at once the erection of a 4-story addition to their large mill in Briggsville, and will also add another story to the present mill.

WOONSOCKET, R. I.—Plans have been completed for the proposed addition to the plant of the Lawton Spinning Co., of Woonsocket. The building will be practically a duplication of the mill erected by the company about two years ago, and will be built against the end of this mill, thereby making the enlarged plant 400 ft. long and 105 ft. wide, four stories in height. An addition to the present finishing department will also be erected, 65 × 59 ft., costing $12,000, together with an addition to the carding department requiring an expenditure of about $6,000. The latter structure will be 78 ft. long and 59 ft. wide.

CANASTOTA, N. Y.—The D. M. Tuttle Co., manufacturers of gas engines, is having plans prepared for a factory building, 40 × 150 ft., one story, concrete and structural iron. Gordon A. Wright is Arch., Syracuse, N. Y.

The Watson Wagon Co., A. A. Keeler, Pres., will build a factory, 51 × 240 ft., three stories and basement, two dry kiln buildings and an office building, 30 × 60 ft., one story, of steel, brick and concrete construction. Dodge & Day, 608 Chestnut St., Philadelphia, are Engrs.

NEWARK, N. Y.—The Newark Wagon Co., S. F. Sherman, Pres., will erect a factory building, 130 × 160 ft., one and two stories, of concrete construction. J. Mills Platt is Arch., Chamber of Commerce Bldg., Rochester, N. Y.

BUFFALO, N. Y.—The Fillmore Ave. Foundry & Iron Works, Lyman P. Hubbell, Pres., 153 Fillmore Ave., is having plans prepared for additions to its plant at Fillmore Ave. and the Pennsylvania R. R. The plant will be of concrete, brick and steel construction. Dimensions and details are not ready for announcement. Martin C. Schwab is Engr., 161 State St., Chicago.

BUFFALO, N. Y.—The Sowers Mfg. Co. will erect a 3-story and basement factory, 124 × 160 ft., of brick and steel, at Niagara St. and Auburn Ave., to cost $30,000. David W. Sowers is Pres., 1310 Niagara St.

NIAGARA FALLS, N. Y.—The Hooker Electro-Chemical Co. is having plans prepared for rebuilding its plant at Buffalo and Union Aves., a large portion of which (six buildings) was destroyed by fire on May 27. The loss included machinery and equipment amounting to $300,000. The buildings to be replaced are two cell houses, 150 × 300 ft. each, two bleach houses about the same size, a brine tank house and a repair shop. A. H. Hooker is Supt.

WATERTOWN, N. Y.—The New York Air Brake Co. will add to its plant here a 1-story machine shop, 150 × 300 ft., of brick and steel, to cost about $75,000.

SCHENECTADY, N. Y.—The Blittendorf Steel Car & Axle Co. of Davenport, Iowa, and the Canadian Car Wheel & Foundry Co., of Montreal, Que., are to merge in Schenectady, it is stated, with a capitalization of at least $5,000,000 for the manufacture of passenger and freight cars.

FISHKILL, N. Y.—The O'DONNELL CONSTRUCTION CO. of Poughkeepsie, N. Y., has been awarded the mason work for a 3-story building to be erected at Fishkill Landing by the Hammond Slug Shot Co.

PHILADELPHIA, PA.—A factory to cost $10,000 is to be built for J. Hay Shumaker by JAMES W. ORR, at Frankford Ave. and Filmore St.

FORD CITY, PA.—Bids are being called for by the Pittsburg Plate Glass Co., Frick Bldg., Pittsburg, Pa., for the erection of a plant at Ford City to take the place of that recently burned. The new plant will be of steel and concrete construction. The building will be fireproof throughout. It is estimated that the company will spend about $200,000 in improvements at the plant and when the work is finished the capacity of the works will be doubled.

AVIS, PA.—Car shops are to be built at Avis this year to replace the old New York Central repair plant now located at Jersey Shore Junction. The building will be 200 × 320 ft. and will cost $350,000. A. F. CHAPMAN & CO., foot of Breckenridge St., Buffalo, are the general contractors.

BALTIMORE, MD.—A 3-story mill, to be used in the manufacture of licorice paste, will be built at 2731 Boston St. by the J. S. Young branch of the McAndrew & Forbes Co., a subsidiary of the American Tobacco Co. Application for permission to start the work has been made. The plans, which were prepared by C. M. Anderson, Arch., 324 North Charles St., call for a building of brick 37 × 56 ft., to cost $10,000. The contract has been awarded to the DAVID W. ANDREW CO.

PARKERSBURG, W. VA.—Plans for the factory building of the Hugh Donovan Boiler Works are being prepared by R. H. Adair, Arch., 222 Fifth St.

SALISBURY, N. C.—The Hamilton-Brown Tanning Co., capitalized at $50,000, has applied for a charter and will operate a plant here within a few weeks. John Scullen, of Charlotte, N. C., is Pres.

ANNISTON, ALA.—The Henderson-Sturges Piano Co., with a paid-in capital of $150,000, will locate in Anniston. The plant will have an initial capacity of 3,000 pianos annually, employing from 100 to 150 men.

BOGALUSA, LA.—Officials of the Great Southern Lumber Co. announce that the planing mill which was destroyed at Bogalusa, La., a few days ago will be rebuilt as soon as possible. It is hoped to have the new mill in operation within the next three or four months. The new plant will be an exact duplicate of the old. In the meantime the company will handle all business through the Pearl River Lumber Co. at Pearlhaven, Miss., a subsidiary corporation of the Great Southern Lumber Co.

MEMPHIS, TENN.—The Lake View Traction Co., Memphis, Tenn., plans to build a car shed adjoining its power station, to be 24 × 140 ft. and 24 ft. high in front and 20 ft. in the rear. It will contain two standard gage tracks, with a 60-ft. cement pit under each track, also a small machine shop. W. W. Hayden, Memphis, is Ch. Engr. and Secy.

COLUMBUS, OHIO.—Plans are being prepared for an addition to the plant of the Union Fork & Hoe Co. on Dublin Ave. Invited bidders will be asked to figure on the work.

ELYRIA, OHIO.—The plans of John H. Prescott, Arch., Majestic Bldg., Lorain, Ohio, for a 2-story reinforced concrete building for the Peerless Laundry Co., of Elyria, have been accepted and the architect is preparing the blue prints and specifications in order to receive bids on the work within a short time. The estimated cost of the entire structure will be close to $20,000. The building will have a frontage of 60 ft. and a depth of 175 ft.

TOLEDO, OHIO.—F. H. Alfred, Asst. to William Cotter, Pres. of the Cincinnati, Hamilton & Dayton Ry. Co., Cincinnati, has announced that the contract has been let for the $100,000 terminal roundhouse and machine shop which is to be built by the company at Toledo, to RABBITT & SON, of Toledo. Work on the construction of the building will be begun at once. It will be built of brick, with a cement foundation.

CINCINNATI, OHIO.—The plants of the Cincinnati Roofing, Tile & Terra Cotta Co. and the Jacob Freund Roofing Co., at Winton Pl., which were recently destroyed by fire, will be reconstructed, and enlarged in size. The dimensions of the tile plant will be 40 × 250 ft., while the roofing plant will be 80 × 450 ft. The cost of the two buildings will be about $20,000.

Through a sale just consummated of a lot on Reading Road a $100,000 brick structure is to be built by the Edna Smelting Works. Recently a sale was made to this company by the Pendelton Estate, by which the smelting company purchased a frontage adjoining the plant of the Edna Smelting Works at 529-531 Reading Road. Isaac Joseph, an official of the company, has announced that his concern is having Gustave Drach, Union Trust Bldg., Arch., make plans for a 6-story concrete building which, with the cost of the additional land, will mean an outlay of at least $100,000. The building will have a front on Reading Road and a depth of 250 ft. It will be an office and manufacturing building and will be occupied entirely by the smelting company. Work of building will be commenced at once.

GOSHEN, IND.—The Goshen Buggy Top Co. has ordered plans for the construction of a 2-story factory building on the corner of Second and Clinton Sts.

The Thomas Albright Co. is preparing to build a factory building in the Wurster Addition.

INDIANAPOLIS, IND.—Oscar V. Rouse has ordered plans on which bids will be asked for the erection of an elevator and feed mill at the corner of Washington and Davidson Sts.

CARTHAGE, IND.—The U. S. Board & Paper Co. has ordered plans for the erection of an addition to its plant. Bids will be asked for the construction of the addition and also for the installation of a Hamilton cross compound engine and of a condensing plant and a vacuum plant.

GARY, IND.—The owners of the Huntington Brewery, of Huntington, Ind., are preparing to erect a $200,000 brewery at Gary, Ind.

DETROIT, MICH.—The Morton [illegible] king Co., 65 Cherry St., has let the general contract for the proposed 2-story addition to the present plant, 75 × 120 ft., to S[illegible]ILLINGER BROS. & CO., 364 Illinois St., cost, $15,000.

Improvements and additions are to be made to the plant of the Cadillac Motor Car Co., at Detroit, during the summer. [illegible] of the additions is to be a foundry. The site is 50 acres of land recently purchased and the plant is to be in four sections, each building to be 75 × 1,200 ft. in size. When work is begun on this, the construction of additional factory and office buildings on Woodward Ave. will be commenced. The present main factory and offices faces Cass Ave. a block west of Woodward Ave., and the new buildings are to occupy the ground between Cass and Woodward Aves., extending to both sides of Amsterdam Ave. It is planned to make the main factory from four to eight stories in height, but the details have not been completed. It is probable that the capitalization of the company will be increased to $5,000,000.

DETROIT, MICH.—C. F. J. Barnes, Tolsma Bldg., Detroit, has prepared plans and specifications for a Machinery Hall, two stories, 64 × 300 ft., for the Michigan State Agricultural Society, J. E. Hannon, Secy., Bowles Bldg., Detroit. Reinforced concrete, stock brick, composition roof, structural iron and electric fixtures will be used in construction. Cost, $25,000.

Spier, Rohn & Gehrke, Chamber of Commerce Bldg., Detroit, are preparing plans and specifications for a 1 and 2-story automobile factory building, 50 × 200 ft., for John Beyster, 875 Fort St. West. Construction will be of press and stock brick, Bedford stone, with composition roof, galvanized iron skylight and cornice, structural iron, hard wood finish in office, concrete and wood floors and electric fixtures. Cost, $18,000.

Shiels & Allister, Archs., Hamlet Bldg., Detroit, have let the mason contract to HORTON & STONER, 223 Avery Ave., and structural iron to A. ROHNS & CO., 13[illegible] Cass Ave., for the power-house for J. C. McDonald & Co., McGraw Bldg., Detroit.

Malcomson & Higginbotham, Moffat Bldg., Detroit, have let the following contracts for the new factory building for the Clayton & Lambert Mfg. Co., Trombley and Beaubien Sts., John E. Lambert, Secy.: Masonry to F. H. GODDARD, 910 Ford Bldg.; carpentry, to JOHN WHITTAKER & CO., 51 Church St.

Albert Kahn & E. Wilby, Trussed Concrete Bldg., Detroit, have let the general contract for the proposed automobile factory, one story, 580 × 60 ft., and two stories, 240 × 60 ft., for the Hudson Motor Car Co., Jefferson Ave. and Belt Line R. R., to the A. J. SMITH CONSTRUCTION CO., Hammond Bldg. Cost, $60,000.

Nettleton & Weaver, Penobscot Bldg., Detroit, let the following contracts on May 3 for the C. M. Hall Lamp Co., C. M. Hall, Mgr., 363 Handcock Ave. East: Masonry, to HENWOOD & BROWN, 840 Trumbull Ave.; carpentry, to C. J. KELLER & CO., 637 Canfield Ave. East; composition roofing, to H. C. HINES CO., 354 Humboldt Ave.; steam heating and plumbing, to ERNST BROS., 414 Woodward Ave.; painting, to WILLIAM DIEDRICH, 680 Gratiot St.

GRAND RAPIDS, MICH.—William Powell, of the Powell Mfg. Co., Lyon and Campeau Sts., Grand Rapids, Mich., is having plans and specifications prepared for a 2-story factory, 53 × 150 ft., to cost $18,000.

MADISON, WIS.—The Gay Chapman Co. is having plans prepared for the erection of a store, office and factory building on State St.

JEFFERSON, WIS.—HENRY SELMER, of Green Bay, Wis., has the contract to erect a condensed milk plant in this city for the Sheboygan Evaporated Milk Co.

NORTH MILWAUKEE, WIS.—The Wisconsin Automobile Radiator Co., recently organized with $50,000 capital, is preparing to erect a factory building. Plans are not complete.

MILWAUKEE, WIS.—The National Brake & Electric Co. has made application for a permit to build a $50,000 addition to its plant at Belleview and Larkin Pls. It will be 1-story high, 118 × 193 ft. and of reinforced concrete construction, brick filled. H. J. Esser, 82 Wisconsin St., is Arch.

MINNEAPOLIS, MINN.—Shops that will employ several thousands of men will be built by the Northern Pacific Ry. Co. in Minneapolis. Work will begin at once upon a group of buildings that will be erected because of the imperative need, and later there will be enlargements and additions. The work will begin at Marshall St. and 37th Ave., N. E. George T. Slade, Vice-Pres. of the Northern Pacific, has announced, according to local press reports, that the company has plans for the enlargement of its terminals in northeast Minneapolis and the construction of shops that will call for the expenditure of a large sum and will greatly increase the capacity of the company for handling Minneapolis business. About $500,000 will be spent this year, but the plans that are herewith announced are but outlined, it being the purpose later to add to them, and the sketches were made with later additions in mind. The Northern Pacific will lay 20 miles of new trackage beginning at the southern end of a strip of land acquired about a year ago that extends out beyond the Anoka County line. This will add to the yard capacity and take pressure off the Northtown yards. The company has taken out a building permit covering a contract for $125,000 which LIBBY & NELSON will handle, for the construction of a group of buildings about which, eventually, shops will be constructed. The work that will be started at once provides for a brick roundhouse, a frame coal shed, 56 × 56 ft., a sand house, a paint house, a machine shop and a sand room and office building, 41 × 75 ft. There will also be an oil storage house, 122 × 22 ft. A well is to be driven and several minor buildings are planned. The principal exp[illegible]se will be upon the roundhouse, which will have 30 stalls. It is proposed to use it for the road locomotives exclusively and not for yard engines. The strip on which the road is working comprises about 140 acres at its southern end and extends northward for about half a mile into Anoka County. Eventually this entire acreage will be covered with yards. W. L. Darling, St. Paul, Minn., is Ch. Engr.

KANSAS CITY, MO.—Announcement is made here that the Missouri Pacific Ry. System will spend $200,000 at once to enlarge repair shops here. G. W. Smith, St. Louis, Mo., is Supt. of Machinery.

The National Biscuit Co. has purchased a tract of 50,000 sq. ft. of land on the belt line and will begin in a few weeks the building of a new plant. The cost, it is reported, will be in excess of $1,000,000. The company now operates a large plant on the North Side.

QUANAH, TEX.—Hammond, McKeehen & Co., of Kansas City, Mo., will erect a garment and clothing factory building here to cost about $60,000. It will be built of concrete and brick.

SPOKANE, WASH.—Donaldson & Meier, Archs., Penobscot Bldg. Detroit, Mich., are preparing plans for a 2-story office and factory building, 50 × 100 ft., for the Otis Elevator Co., of Spokane, Wash.; also a 2-story office and factory building, 50 × 100 ft., for the Otis Elevator Co., of Portland, Ore.

PORTLAND, ORE.—See Sponake, Wash.

MARICOPA, CAL.—The Sunset Monarch Refining Co.'s plant at Maricopa, owned by the Spreckels Co., of San Francisco, was destroyed by fire at a loss of $265,000. It is to be rebuilt at once.

WELLAND, ONT.—The Canadian New Way Motor Co., Ltd., chartered with a capitalization of $50,000, as the Canadian branch of the New Way Motor Co., of Lansing, Mich., will erect a plant here for the manufacture of air-cooled gas and gasoline engines.

WINGHAM, ONT.—A by-law was carried here on May 20, granting a bonus and a free site to C. Lloyd & Son. The firm will at once commence the erection of an extension to their plant, at a cost of $15,000.

TAMPICO, MEXICO.—W. H. Andrews, Gen. Mgr. of the Barataria Canning Co., of New Orleans, La., contemplates establishing a fish canning factory here.

JUAREZ, MEXICO.—The FREEBORN ENGINEERING CO., of Kansas City, Mo., has been given the contract for the erection of a $1,000,000 cement plant for the International Cement Co. at Juarez, Mexico.

MISCELLANEOUS CONTRACTS.

*(*denotes this this work is advertised in Engineering News.)*

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

GRADE CROSSINGS.—Birmingham, Ala.—See under Railways.

STONE DUST.—New York, N. Y.—See item under Streets and Roads.

ROAD ROLLER.—Fort Leavenworth, Kan.—See item under Streets and Roads.

*TOW-BOAT.—New Orleans, La.—Bids will be received by Maj. H. Burgess, Corps Engrs., U. S. A., until 11 a. m., June 24, for a steel hull stern-wheel tow-boat "Teche."

DITCH.—Mitchell, S. Dak.—Bids will be received until June 10 by H. B. Anderson, County Audr., for constructing an open ditch, involving about 24,500 yds. of earth work.

WHARF.—Angers, Que.—Bids will be received until June 17 by Napoleon Tessier, Secy. Dept. Pub. Wks., Ottawa, Ont., for constructing a wharf at Angers, Labelle County, Que.

*DREDGING.—New York, N. Y.—Bids will be received by Col. W. W. Black, Corps Engrs., U. S. A., Army Bldg., New York, until noon, June 27, for dredging in Newtown Creek and Wallabout Channel.

REVETMENT.—South Haven, Mich.—The Harbor Improvement Committee, has awarded the contract for construction of a revetment in the harbor to ROBT. LOVE and N. P. NELSON, of Muskegon, at $33,586.

WHARF.—Miscou Harbor, N. B.—Bids will be received until June 3 by Napoleon Tessier, Secy. Dept. Pub. Wks., Ottawa, Ont., for extension to wharf at Miscou. E. T. P. Shewen is Dist. Engr., St. Louis, N. B.

CANAL IMPROVEMENT.—Port Colborne, Ont.—Bids will be received until June 3 by L. K. Jones, Secy., Dept. Railways and Canals, Ottawa, Ont., for improving the Port Colborne entrance of the Welland Canal.

*POWER BOAT.—Wilmington, Del.—Bids were received by Maj. R. R. Raymond, Corps of Engrs., U. S. A., May 11, for furnishing and delivering a power boat. The contract has been let to JAMES K. CLARKE, at $11,000.

SEAWALL.—San Francisco, Cal.—Bids are asked until June 30 by the Harbor Commissioners for the construction of a seawall in water front of the city, requiring 43,000 tons of rock, 95 tons of structural steel, 6,000 cu. yds. of concrete.

LOCK, DAM, ETC.—New Orleans, La.—Bids will be received by Lieut.-Col. Lansing H. Beach, U. S. A., Custom House, New Orleans, until 11 a. m., June 15 for building lock and dam and lockkeepers' dwelling on Bayon Teche, La.

LEVEE.—Memphis, Tenn.—Bids will be received until noon June 18 by Maj. M. L. Walker, Corps Engrs., U. S. A., Mississippi River Comn., First and Second Districts, Memphis, for levee work in Reelfoot and White River Districts.

HARBOR WORKS.—Michigan City, Ind.—Bids will be received by Maj. Thomas H. Rees, Corps Engrs., U. S. A., Chicago, Ill., until 10 a. m., June 20, for concrete superstructure, pile clumps and interlocking steel sheeting in Michigan City Harbor.

WIRE, MANILA ROPE, ETC.—Vicksburg, Miss.—Bids are asked by Capt. Clarke S. Smith, Corps Engrs., U. S. A., Vicksburg, until noon, June 20, for furnishing wire and manila rope, silicon bronze wire, wire strand, spikes, cable clips and wire staples.

*FIRE ENGINE.—New York, N. Y.—Bids are asked until 10.30 a. m., June 13, by R. Waldo, Fire Comr., for furnishing and delivering all the labor and materials required to make additions and alterations to one second-size Nott fire engine, Boro. of Manhattan.

REPAIRING ARCH.—New York, N. Y.—Bids were received on May 26 by the Department of Parks, for all labor and materials required for repairs to Washington Arch, in Washington Square, Boro. Manhattan. Howard H. Peterson, 1328 Broadway, New York, submitted the lowest bid at $1,498.

DITCH, ETC.—Burlington, Iowa.—Bids will be received until June 9, at the office of the County Auditor for constructing 205,200 ft. of 80, 60, 40, 20, 10 and 8-ft. ditch, requiring 1,475,550 cu. yds.; also 49,350 ft. tile drain, from 24 to 10 ins. Harman Engineering Co., 120 Fredonia Ave., Peoria, Ill., are Engrs.

GRATES.—New York, N. Y.—Bids are asked by George McAneny, Pres. Boro. of Manhattan, until 2 p. m., June 9, for repairs and alterations to the present grates, or the installation of new grates, in the Public Bath Building at the following locations: 133 Allen St., 347 41st St., 232 West 60th St., East 76th St., and John Jay Park, 243 East 109th St., 5 Rutgers Pl., No. 326 Rivington St., No. 538 East 11th St., Avenue A, between 23d and 24th Sts., 83 and 85 Carmine St., Cherry and Oliver Sts.

(Continued on page 238.)

CONTRACT PRICES.

(denotes that this work is advertised in Engineering News.)*

BARGE CANAL.—New York State.—The item prices of the bids received by F. C. Stevens, Supt. Public Works, Albany, N. Y., May 24, for Barge Canal Contract No. 73, providing for the dredging a channel in the Hudson River from Northumberland to Stillwater, a distance of 15 miles, were: (A) Engineer's estimate; (B) E. M. GRAVES, Cleveland, Ohio (awarded contract); (C) S. Pearson & Son, Inc., 507 Fifth Ave., New York:

BARGE CANAL CONTRACT NO. 73.

	A	B	C
Clearing	$500.00	$500.00	$500.00
1,306,000 cu. yds. excavation	.53	.52	.85
17 M. ft. sheeting and bracing	55.00	55.00	60.00
5,000 lin. ft. round timber bracing	.25	.25	.25
21,500 cu. yds. forming embankment	.15	.15	.15
1,200 cu. yds. lining	1.50	1.50	1.65
2 M. ft. sawed lumber (yellow pine or Douglas fir)	55.00	55.00	68.00
2 M. ft. wooden sheet piling	50.00	50.00	56.00
6,500 cu. yds. second-class concrete	7.00	7.00	7.64
29 cu. yds. second-class reinforced concrete	12.00	12.00	12.00
5,800 cu. yds. wash wall	2.50	2.50	2.50
160 sq. yds. second-class stone paving	2.50	2.75	2.50
200 cu. yds. first-class rip-rap	3.00	3.30	3.30
200 cu. yds. second-class rip-rap	3.00	3.30	3.00
300 cu. yds. third-class rip-rap	3.00	3.30	3.00
1,500 cu. yds. fourth-class rip-rap	2.50	2.75	2.50
19,000 lbs. structural steel	.06	.07	.06½
6,200 lbs. metal reinforcement	.03½	.04	.03½
10,800 lbs. iron castings, plain	.03½	.04	.03½
165 sq. yds. wooden pavement, 3¾ in. thick	3.00	3.00	3.00
2,400 lin. ft. wooden fence	.20	.20	.25
670 lin. ft. drilling bolt holes in rock	.60	70	.60
Moving bridge at Lock 5, lump sum	1,200.00	1,200.00	1,200.00
Removing bridge superstructure, lump sum	500.00	600.00	500.00
Maintaining highway traffic, lump sum	200.00	200.00	200.00
Maintaining navigation, lump sum	500.00	500.00	500.00
Coffer-dams, pumping, bailing and draining, lump sum	7,500.00	8,000.00	7,500.00
Deduct price to be paid to the state of New York for buildings in place which are to be removed by the Contractor without expense to the state, lump sum	750.00	750.00	750.00
Totals	$778,360	$767,467	$1,201,618

CHANNEL.—Mystic River, Mass.—Bids were received April 25 for 77,000 cu. yds. of excavation for a new channel for Alewife Brook, from Spy Pond to the Mystic River. The bidders were: (A) Devincenzi & Co., Boston; (B) John J. Falvey, Somerville; (C) William L. Miller, Boston; (D) Cavanagh Bros., South Boston; (E) Luke D. Mullen, Boston; (F) Wellington & McCarthy, Boston; (G) John F. Gill Co., Somerville; (H) Bruno & Petitti, Boston; (I) Coleman Brothers, Boston; (J) EASTERN DREDGING CO., Boston (awarded contract). The work will be done under the direction of the Metropolitan Park Commission, John R. Rablin, Engr. The itemized bids are as follows:

EXCAVATING A NEW CHANNEL FOR ALEWIFE BROOK.

	A	B	C	D	E	F	G	H	I •	J
50,000 cu. yds. excavation, Spy Pond to Arlington Beach	$1.35	$1.00	$0.89	$0.85	$0.80	$0.74	$0.73	$0.69	$0.67	$0.59
2,500 cu. yds. excavation, Arlington Beach to Mass. Ave	1.00	2.50	.89	.85	.80	.75	.80	.69	.67	.87
22,000 cu. yds. excavation, Mass. Ave. to Broadway	1.75	1.10	.89	.85	.80	.88	.73	.69	.67	.77
3,500 cu. yds. excavation, Broadway to Mystic River	1.00	2.50	.89	.85	.80	.75	.80	.69	.67	.87
Totals	$112,000	$89,200	$69,420	$66,300	$62,400	$60,860	$57,360	$53,820	$52,260	$51,660

BARGE CANAL.—New York State.—The item prices of the bids received by F. C. Stevens, Supt. Public Works, Albany, N. Y., on May 24, for Barge Canal Contract No. 63, providing for the improvement of the canal for a distance of 12.22 miles at the west end of Monroe County, were: (A) Engineer's estimate; (B) Maryland Dredging and Contracting Co., Baltimore, Md.; (C) American Pipe & Construction Co., Philadelphia, Pa.; (D) H. S. KERBAUGH, Inc., 522 Arcade Bldg., Philadelphia, Pa. (awarded contract); (E) Butler Bros. Construction Co., 1170 Broadway, New York:

BARGE CANAL, NEW YORK STATE, CONTRACT NO. 63.

	A	B	C	D	E
12.22 miles coffer-dams, pumping, bailing and draining	$2,000.00	$2,000.00	$2,000.00	$2,000.00	$2,400.00
Clearing, lump sum	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00
2,772,000 cu. yds. excavation	.40	.36	.40	.33	.48
85 M. ft. sheeting and bracing	45.00	45.00	45.00	45.00	45.00
500 lin, ft. round timber bracing	.20	.20	.20	.20	.20
20,000 sq. ft. channeling	.25	.20	.30	.25	.25
330,000 cu. yds. forming embankment	.18	.12	.10	.18	.21½
31,600 cu. yds. lining	1.50	1.50	1.00	1.50	1.80
8,200 cu. yds. puddle	2.00	2.20	2.00	2.00	2.40
44 M. ft. sawed lumber (yellow pine or Douglas fir)	55.00	55.00	60.00	55.00	55.00
22 M. ft. creosoted lumber	70.00	70.00	80.00	70.00	70.00
19,600 lin. ft. foundation piles	.35	.30	.40	.35	.33
45 M. ft. wooden sheet piling	50.00	50.00	60.00	50.00	50.00
51,700 cu. yds. second-class concrete	7.00	6.90	5.50	7.00	6.00
6,100 cu. yds. third-class concrete	6.00	6.00	5.00	6.00	5.00
2,300 cu. yds. reinforced concrete	12.00	12.00	12.00	12.00	11.00
32 cu. yds. first-class masonry coping	30.00	30.00	25.00	30.00	28.00
74,600 cu. yds. wash wall	2.50	2.40	2.18	2.50	2.75
14 sq. yds. first-class stone paving	2.50	2.50	2.50	2.00	2.50
10,100 sq. yds. second-class stone paving	1.50	1.50	1.50	1.50	1.50
1,640 sq. yds. third-class stone paving	1.25	1.25	1.00	1.25	1.25
552 sq. yds. cobblestone paving	1.25	1.75	1.00	1.25	1.25
400 cu. yds. second-class rip-rap	2.75	2.75	3.00	2.75	2.75
250 cu. yds. third-class rip-rap	2.50	2.50	2.50	2.50	2.50
9,540 cu. yds. fourth-class rip-rap	1.75	2.00	2.00	1.75	1.50
1,063,000 lbs. c.-i. culvert pipe and specials	.02¼	.02½	.02	.02¼	.02¼
2,465,000 lbs. structural steel	.05	.05	.04½	.05	.04
383,000 lbs. metal reinforcement	.03½	.03½	.03	.03½	.03½
16,500 lbs. iron castings, plain	.03½	.03½	.04	.03½	.03½
5,700 lbs. expanded metal	.05½	.05½	.05	.05½	.05½
5,850 sq. ft. Portland cement sidewalks	.25	.25	.15	.25	.20
45 sq. yds. relaying flag sidewalks	.50	.50	.40	.50	.50
1,760 sq. yds. wooden pavement, 2¾ in. thick	2.75	3.00	2.75	2.75	2.00
2,012 sq. yds. wooden pavement, 3¾ in. thick	3.00	3.30	3.00	3.00	2.50
500 sq. yds. wood block pavement	3.00	3.00	3.00	3.00	2.50
10,400 lin. ft. wooden fence	.20	.20	.24	.20	.20
1,030 lin. ft. wrought iron pipe railing	1.75	1.75	1.25	1.75	1.75
1,600 lin. ft. lattice railing	1.50	1.50	1.50	1.50	1.50
16,000 lin. ft. repointing old masonry	.05	.05	.05	.05	.04
100 lin. ft. drilling bolt holes in old masonry	1.00	1.00	1.00	1.00	1.00
230 lin. ft. resetting pipe railing	.20	.20	.20	.20	.20
3 sluice gates, 36×36 in., each	325.00	325.00	325.00	325.00	325.00
4 sluice gates, 24×24 in., each	225.00	225.00	225.00	225.00	225.00
1 sluice gate, 24 in. diam	200.00	200.00	200.00	200.00	200.00
3 sluice gates, 42 in. diam., each	350.00	350.00	350.00	350.00	350.00
465,000 lbs. metal in guard gates	.05½	.06	.05	.05½	.05
52,000 lbs. machinery for lift bridge	.12	.12	.12	.12	.11
1 electrical equipment	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00
1 Operator's cabin	400.00	400.00	400.00	400.00	300.00
1 pump	450.00	450.00	450.00	450.00	400.00
274,000 sq. ft. tar felt waterproofing	.05	.05	.04	.05	.04½
For removing old bridge superstructure, lump sum	2,500.00	2,500.00	2,500.00	2,500.00	2,000.00
For maintaining navigation, lump sum	12,000.00	14,400.00	10,000.00	12,000.00	11,000.00
For maintaining highway traffic, lump sum	8,000.00	9,600.00	8,000.00	8,000.00	7,000.00
Deduct price to be paid to the State of New York for buildings in place which are to be removed by the Contractor without expense to the State, per lump sum	2,000.00	2,000.00	2,000.00	2,000.00	1,600.00
Deduct price to be paid to the State of New York for bridge superstructures in place which are to be removed by the Contractor without expense to the State, per lump sum	300.00	300.00	300.00	300.00	300.00
Totals	$2,184,083	$2,052,844	$2,014,411	$1,990,043	$2,354,379

MISCELLANEOUS CONTRACTS.

(Continued from page 237.)

*STEEL FURNITURE, ETC.—Louisville, Ky.—Bids will be received by the Board of Water-Works at their office, 439 Third St., Louisville, until 10 a. m., June 20, for steel furniture and equipment for vaults of the company's new office building. Plans are on file in the office of the purchasing agent. Charles F. Grainger is Pres. Bd.

CULVERTS.—Cincinnati, Ohio.—Bids were received on May 20 by the Commissioners of Hamilton County, under Specifications No. 43, for the building of culverts and changing course of creek on West Fork road, between schoolhouse and Rehkamp's in Millcreek Township. Contract was awarded on May 27 to JOSEPH GRADISON, Fosdick Bldg., Cincinnati. Estimated cost, $22,360. Fred. Dreihs, Clk. Bd. Comrs.

ROAD OIL.—New York, N. Y.—Bids were received on May 26, by the Department of Parks for furnishing and delivering 1,000 bbls. of emulsifying road sprinkling oil at Prospect Park West and Seventh St., Prospect Park, and gravel pit, Ocean Parkway, near Avenue P, Boro. of Brooklyn. Contract has been awarded to the STANDARD OIL CO., 26 Broadway, New York, at 6¾ cts. per gallon. Total, $3,375.

DREDGING, ETC.—Boston, Mass.—Bids will be received until June 3 by the Board of Harbor and Land Commissioners, State House, Boston, for improving Menamsha Inlet in Gay Head and Chilmark, requiring about 25,000 cu. yds. of dredging sand to deepen the channel and furnishing and placing 1,500 tons of granite quarry grout and chips to strengthen the jetties and protect the banks of the channel. Frank W. Hodgson is Ch. Engr.

*WHARF.—Richmond, Va.—Bids will be received at the office of the City Engineer until 4 p. m., June 7, for the construction of a pile bulkhead wharf along the east shore of James River, from Gillies Creek to Nicholson St., and for deepening river bed alongside said wharf to channel, in accordance with plans and specifications. The Committee on James River Improvement reserves the right to award the contract as a whole or in separate parts. Charles E. Bolling is City Engr.

BARGE CANAL.—Albany, N. Y.—F. C. Stevens, Supt. Public Works, has awarded Barge Canal Contract No. 63, providing the the improvement of the Erie Canal from the west line of Wayne County to the east end of Contract No. 23 at Kings Bend, a distance of 12.22 miles, to H. S. KERBAUGH, INC., Arcade Bldg., Philadelphia, Pa., for $1,990,043; and Barge Canal Contract No. 73, providing for dredging a channel in the Hudson River from Northumberland to Stillwater, a distance of 15 miles, to E. M. GRAVES, of Cleveland, Ohio, for $767,467.

DRAIN.—Rockwell City, Iowa.—Bids were received on May 23, by C. O. Dixon, County Audr., for the construction of Joint Drain No. 70, in Webster County, and No. 95, in Calhoun County. Estimated quantity, 623,079 cu. yds. All bids to be by sections and bids also for drain or improvement complete. The payment on this work will be as provided for by the Iowa law, 80% monthly estimates, balance on completion. It is probable that bonds will be sold and the contractor on this work paid in cash. Contract has been awarded to M. C. McGINNIS, Bement, Ill., at 6.11 cts. per cu. yd. G. P. Smith, Fort Dodge, Iowa, is Engr. in charge of construction.

*DITCHES.—St. Paul, Minn.—Bids were received on May 18 by Samuel G. Iverson, State Audr., St. Paul, for constructing State Ditch No. 83, located in Marshall County, Minn.; contains 720,000 cu. yds. State Ditch No. 90, located in Kittson County, Minn.; contains 480,000 cu. yds. State Ditch No. 91, located in Roseau County, Minn.; contains 1,339,524 cu. yds. State Ditch, No. 92, located in Koochiching County, Minn.; contains 234,476 cu. yds. These ditches can be constructed with a floating dredge. The following contracts have been awarded: Ditch No. 90, STANDARD DRAINAGE CO., 7.94 cts. per cu. yd. for excavation, total, $46,327. Ditch No. 91, FOLEY & GLEASON, 9.45 cts. per sq. yd., total, $143,340. Contracts were not awarded on Nos. 83 and 92 as these bids were held awaiting a court decision.

U. S. POSSESSIONS.

CORRUGATED IRON.—Panama. — Bids were received as follows on May 31 by the General Purchasing Officer of the Isthmian Canal Commission, Washington, D. C., for furnishing a quantity of corrugated iron bars: Corrugated Bar Co., St. Louis, Mo., $18,547; General Fireproofing Co., Washington, $18,462; R. C. Hoffman, Baltimore, Md., $19,193; J. B. Kendall Co., Washington, $16,740; Buffalo Steel Co., Washington, $17,255; Railway Steel Spring Co., New York (part), 2¼ cts. per lb.

EXAMINATIONS.

ELECTRICIAN.—New York, N. Y.—Applications will be received until June 9 by the Municipal Civil Service Commission, 299 Broadway, for the position of Electrician, examination for which will be held on July 8. Age limit, 21 years. Salary, $4.50 a day. F. A. Spencer is Secretary of the Commission.

JUNIOR ENGINEER.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on July 13-14, to secure eligibles from which to make certification to fill vacancies as they may occur in the Reclamation Service in the position of Assistant Engineer at salaries of $1,500 a year and upward, and Junior Engineer at salaries of $900 and upward. Age limits: Assistant Engineer, 25 to 45 years, and Junior Engineer, 20 to 45 years. Full information relative to the scope and character of these examinations is contained in Sections 48 and 153 of the Manual of Examinations. Applicants should at once apply for application **Form 1312 and a copy of the Manual of Examinations revised to January 1, 1910, to the U. S. Civil Service Commission, Washington, D. C.**

LIST OF CONTRACTS PENDING.

Light, Heat and Power Plants.

		Noted in issue of
6- 3	Gas, etc., Dayton, Ohio	6- 2
6- 4	**Heating systems, etc., Boston, Mass.**	**5-12**
6- 6	**Heating system, Fort Logan H. Roots, Ark.**	**5-19**
6- 6*	**Elec. lighting system, Fort Andrews, Mass.**	**5-19**
6- 6	Transmission line, Coquitlam, B. C	6- 2
6- 8	**Lighting plant, La Moure, N. Dak.**	**5-12**
6- 6	Electric equip., New York	5-26
6- 9	Elec. light fixtures, Newton, Iowa	5-26
6- 9	Elec. wiring, Plattsburg, N. Y.	5-26
6-10	Heating plant, Omaha, Neb.	5-26
6-11	**Substation, Charleston, S. C.**	**5-12**
6-11	**Piping, etc., Charleston, S. C.**	**5- 5**
6-11	Remodeling elec. light system, Ft. Snelling, Minn	6- 2
6-14	Heating plant, Wahpeton, N. Dak.	5-26
6-15	Lighting fixtures, Washington, D. C	6- 2
6-16	Power-house addition, Athens, Ohio	6- 2
6-17*	Hydroelectric plant, etc., Idaho Falls, Idaho	**5-26**
6-21	Power plant, Monticello, Iowa	6- 2
6-22	Lighting fixtures, Washington, D C	6- 2
6-27*	Conduit, etc., St. Louis, Mo.	6- 2
6-29*	Power plant, Cleveland, Ohio	6- 2
6-30*	Boiler, Baltimore, Md.	6- 2
6-30	**Power plant, Cisco, Utah**	**5-19**

Bridges.

6- 3	**Bridge, Taylor Falls, Minn**	**5-12**
6- 3	Bridge, Fort William, Ont.	6- 2
6- 3	Bridge work, Watertown, N Y	6- 2
6- 4	Bridges, Centralia, Wash	5-26
6- 4	Bridge, Massena, N. Y.	5-26
6- 6	Bridge, Los Angeles, Cal	5-26
6- 6	Bridges, Duluth, Minn.	5-26
6- 6	Bridge, Hammond, Ind.	5-26
6- 6	Superstructure, Warren, Ohio	5-26
6- 6	Bridge, Smithfield, N. C	5-26
6- 6	**Bridge, Jeffersonville, Ind**	**5-12**
6- 6	**Bridges, Crown Point, Ind**	**5- 5**
6- 6	Bridge, Nashua, N. H	5-26
6- 6	Bridge work, Jamestown, N. Dak.	6- 2
6- 6	Bridges, Wahpeton, N. Dak	6- 2
6- 6	Bridge, Newport, Ind	6- 2
6- 6	Abutments, etc., Leetonia, Ohio	6- 2
6- 7	Bridges, Colfax, Wash	6- 2
6- 7	Bridge, New Castle, Wyo	6- 2
6- 7	Bridges, Plymouth, Ind	6- 2
6- 7	Bridge, Vicksburg, Miss	6- 2
6- 7	Bridges, Farmington, Mo	5-26
6- 7	Bridges, Highland Park, Ill	5-26
6- 7	Bridges, Madison, Ind.	5-26
6- 7	Bridges, Shelbyville, Ind.	5-26
6- 7	Bridges, etc., Fort Wayne, Ind.	5-26
6- 8	Bridge, Cheyenne, Wyo	5-26
6- 8	Bridge approach, Hastings, Minn.	5-26
6- 8	Bridges, La Fayette, Ind	5-26
6- 8	Bridges, Greencastle, Ind	5-26
6- 8	**Bridges, Troy, Ohio**	**5-19**
6- 8	Bridges, Marysville, Mo	6- 2
6- 8	Bridge, Glasgow, Mont	6- 2
6-11	Bridge, Larkspur, Colo	6- 2
6-11	Bridge, Granite, Colo	6- 2
6-13	Abutment, Delaware, Ohio	6- 2
6-13*	Substructure, etc., Fort Smith, Ark.	5-26
6-14	Bridge, Lima, Ohio	6- 2
6-16	Bridge work, New York	6- 2
6-17	Superstructure, Cincinnati, Ohio.	5-26
6-20	**Bridge, Greenfield, Ind**	**5-19**
6-20	Bridges, Cedartown, Ga	6- 2
6-21*	**Bridge work, St. Louis, Mo**	**5-19**
6-22	Bridge work, Cleveland, Ohio	5-26
6-25	Bridge, San Antonio, Tex	6- 2
6-28*	**Bridge, Winnipeg, Man**	**5- 5**
7- 5	**Bridge, Stevenson, Wash**	**5-12**
7- 6	Bridges, Metz, Cal.	5-26
7-25	Bridges, Leesburg, Va.	5-26

Buildings.

6- 4	**Ice plant, Ft. Sam Houston, Tex. (Mfg. Pl.)**	**5-12**
6- 4	**Laundry, Ft. Sam Houston, Tex. (Mfg. Pl.)**	**5-12**
6- 4	Gymnasium, Ft. Porter, N. Y.	5-26
6- 4*	Comfort stn., Niagara Falls, N. Y.	5-26
6- 6	Mech. equip., Philadelphia, Pa.	5-26
6- 6	Court-house, Fairfield, Cal.	5-26
6- 6	Schools, New York	5-26
6- 6*	**Elevators, New York**	**5- 5**
6- 6	School, Fond du Lac, Wis	6- 2
6- 7	Ordnance, Ft. Stark, N. H	6- 2
6- 7	Hospital, New York	6- 2
6- 7	**Post-office, Fremont, Neb**	**4-28**
6- 8*	Buildings, Ft. D. A. Russell, Wyo.	5-19
6- 8	School, New York	6- 2
6- 8	Quarters, etc., Boise, Idaho	6- 2
6- 9	Quarters, etc., Ft. Leavenworth, Kan	6- 2
6- 9*	**Post-office, Middletown, N. Y.**	**5- 5**
6- 9*	**Plumbing, Madison Barracks, N. Y.**	**5-12**
6- 9	**Quarters, Plattsburg, N. Y**	**5-19**
6-10	Church, Indianapolis, Ind	6- 2
6-11	Storehouse, etc., Ft. Screven, Ga.	6- 2
6-11	**Elevators, Omaha, Neb**	**5-19**
6-11*	**Stable, Madison Barracks, N. Y.**	**5-19**
6-11	**Nurses' quarters, New York**	**5-12**
6-13	**Boiler plant, Pittsburg, Pa**	**5- 5**
6-13*	**Bakery, Madison Baracks, N. Y. (Mfg. Pl.)**	**5-19**
6-14	**Post-office, Asbury Park, N. J.**	**5-12**
6-14	Dept. building, Ottawa, Ont.	5-26
6-15	**Alterations, etc. San Francisco, Cal.**	**5-12**
6-15	**Schools, Magnolia, Ark**	**5- 5**
6-15*	**Building, Cincinnati, Ohio**	**5-19**
6-15	Guardhouse, Ft. Barrancas, Fla.	6- 2
6-16*	**Plumbing, Charleston, S. C**	**5-19**
6-16*	**Guardhouse, Ft. Strong, Mass**	**5-19**
6-19	Plans, Milwaukee, Wis	5-26
6-20*	**Post-office, Columbus, Ind**	**5-19**
6-20	School, Bloomingdale, Ind	6- 2
6-23	Post-office, Clinton, Mo	5-26
6-24*	Post-office, Aiken, S. C	5-24
6-25	Foundation, Boston, Mass	6- 2
6-27	Post-office, Minneapolis, Minn	5-26
6-28*	**Post-office, Plattsmouth, Neb**	**5-26**
6-29	**Post-office, Chambersburg, Pa**	**6- 2**
6-30*	**Post-office, Greenville, Ill**	**5-26**
7- 1	**Plans, New Orleans, La**	**3-17**
7- 1	Post-office, Jeffersonville, Ind.	6- 2
7-11*	Post-office, Columbus, Neb	6- 2

Water-Works.

6- 3*	**Dam work, Danville, Ill**	**5-19**
6- 4	**Water-works addition, etc. Fort Williams, Me.**	**5-19**
6- 4	Fire-protection system, etc., Boston, Mass	6- 2
6- 5	Wells, Savage, Minn	6- 2
6- 6	Intake pipe, Lewiston, Idaho	6- 2
6- 6	Water mains, Nicollet, Minn	6- 2
6- 6	Standpipe, Portsmouth, Iowa	6- 2
6- 6	Water pipe, Newark, Del	6- 2
6- 6	Steel tank, Fort Logan H. Roots, Ark.	5-19
6- 6	**Distr. system, Ft. Missoula, Mont.**	**5-19**
6- 6	**Reservoir, Jacksonville, Fla**	**5- 5**
6- 6*	Dam, Newburgh, N. Y	5-26
6- 6	Well, Corydon, Iowa	5-26
6- 7	**Reservoir, Waterbury, Conn**	**5-12**
6- 7	**Water-works, ext., Havelock, Neb.**	**5-19**
6- 7	Water pipe, International Falls, Minn	6- 2
6- 7	Reservoir, Hazelhurst, Miss	6- 2
6- 7	Water-works, Brookville, Miss	6- 2
6- 8	C.-I. pipe, Olean, N. Y	6- 2
6- 8	Smokestacks, Brooklyn, N. Y	6- 2
6- 8*	W.-Wks. material, Athens, Tex.	5-19
6- 8*	Tower and tank, Kankakee, Ill.	5-26
6- 9	Wells, Rahway, N. J	5-26
6- 9	Water system, Lima, Ohio	6- 2
6-10	Water-works, Petersburg, Neb.	6- 2
6-10*	Reservoir, Tyrone, Pa	5-26
6-10	**Reservoir, Fort Sill, Okla**	**5-19**
6-11	Water-works extension, Macomb, Ill	6- 2
6-14	**Water main, Cleveland Heights, Ohio**	**5-19**
6-14*	**Pump station, Detroit, Mich**	**4-21**
6-14*	Water system, Harrison, N. Y.	5-26
6-14	Water-works, Huntsville, Mo	5-26
6-14	Water main extensions, etc., North Chicago, Ill.	5-26
6-15	**Filter, Clarksburg, W. Va**	**5-19**
6-15*	Reservoir, Pittsburg, Pa	6- 2
6-15	Hydrants, New York	6- 2
6-16	Water mains, Batesville, Ind	6- 2
6-17	Franchise, Long Beach, Cal	6- 2
6-20	W.-Wks. franchise, Dayton, Ky.	5-26
6-21	Reservoir, Cheyenne, Wyo	6- 2
6-21	Filter plant, Atlanta, Ga	6- 2
7- 1	Steel pipe, Los Angeles, Cal	5-26
7- 8	**Canal enlargement, Boise, Idaho.**	**5-19**

Sewers.

At once,	Sewers, Sydney, N. S.	6- 2
6- 3	**Sewer, Appleton, Wis**	**5-12**
6- 3	Sewers, Milwaukee, Wis	6- 2
6- 3	Sewers, Salt Lake City, Utah	6- 2
6- 3	Sewer Sioux City, Iowa	6- 2
6- 3	Sewer, Parkersburg, W. Va	6- 2
6- 3	Sewers, etc., Dormont, Pa	6- 2
6- 4	**Sewer additions, Ft. Williams, Me.**	**5-19**
6- 6	Arch or sewer, Vicksburg, Miss.	6- 2
6- 6*	**Sewers, Plainfield, N. J**	**5-12**
6- 6	Sewer system, Ft. Missoula, Mont.	5-26
6- 6	Sewers York, Pa	5-26
6- 6*	Sewers, Marcus Hook, Pa	5-26
6- 6	Sewers, Elmira, N. Y	6- 2
6- 6	Sewer, McKees Rocks, Pa	6- 2
6- 6	Disposal work, Regina, Sask	6- 2
6- 6	Pipe, etc., Knoxville, Tenn	6- 2
6- 6	Sewers, Marseilles, Ill	6- 2
6- 6	Sewer, Duquesne, Pa	6- 2
6- 7	Sewers, Middletown, Ohio	6- 2
6- 7	Sewers, Laporte, Ind	5-26
6- 7	Sewers, Lorain, Ohio	5-26
6- 7	**Sewer, St. Louis, Mo**	**5-12**
6- 7	**Sewers, Havelock, Neb**	**5-19**
6- 7*	**Sewage pump station, Chattanooga, Tenn**	**5-19**
6- 8	**Sewers, Princeton, W. Va**	**5- 5**
6- 8	Sewers, Sandusky, Ohio	5-26
6- 8	Sewers, Brooklyn, N. Y	5-26
6- 8	Repairing sewage pumps, Brooklyn, N. Y	5-26
6- 9	Sewer, Huntington, W. Va	5-26
6- 9	Sewer bonds, Norfolk, Va	5-26
6- 9	Sewer, Montreal, Que	6- 2
6- 9	Sewers, etc., Abilene, Kan	6- 2
6- 9	Sewers, Wilkes-Barre, Pa	6- 2
6-10*	Sewers, Louisville, Ky	5-26
6-14	**Sewer, St. Louis, Mo**	**5-12**
6-14	Sewers, Belton, Tex	5-26
6-15	Lateral sewer, Vancouver, Wash.	5-26
6-15	Sewer system, Columbia, Tenn.	6- 2
6-17*	Drain tile, Deland, Ill.	6- 2
6-21*	**Sewer, St. Louis, Mo**	**5-19**
6-22*	Sewerage extensions, etc., Freehold, N. J.	5-26
6-24	Sewers, Lebanon, Ohio	6- 2

Streets and Roads.

6- 3*	Planking, paving, Watertown, N. Y.	5-26
6- 3	Road, Concord, N. H	5.26
6- 3	Macadam, Wadesboro, N. C	5-26
6- 3	Macadam, Cincinnati, Ohio	5-26
6- 3	Paving, Logan, Ohio	5-26
6- 3	Paving, Duluth, Minn.	5-26
6- 3	**Road, Mt. Gilead, Ohio**	**5-19**
6- 4	**Paving, Racine, Wis**	**5-19**
6- 4	Paving, New Haven, Conn	5-26
6- 4*	Sidewalks, Wash., D. C	5-26
6- 4	Roads, etc., Whipple Barracks, Ariz	6- 2
6- 6	Curb, Newark, Del	6- 6
6- 6	Roadway, Portland, Me.	5-19
6- 6	**Road repairs, Albany, N. Y**	**5-19**
6- 6	Grading, Perth Amboy, N. J	5-19
6- 6	**Road, Wauseon, Ohio**	**5-19**
6- 6	**Road, Kentland, Ind**	**5-19**
6- 6	**Gravel road, Williamsport, Ind**	**5-12**
6- 6	**Stone road, Vernon, Ind**	**5-12**
6- 6*	Paving, Plattsburg, N. Y	6- 2
6- 6	**Gravel roads, Tipton, Ind**	**5-12**
6- 6	**Gravel road, Crawfordsville, Ind.**	**5-12**
6- 6	Street work, Yonkers, N. Y	5-26
6- 6	Paving, Lucas, Ohio	5-26
6- 6	Sidewalks, Southport, Ind.	5-26
6- 7	Gravel road, Richmond, Va	5-26
6- 7	Roads, Valparaiso, Ind	5-26
6- 7	Roads, Rockville, Ind.	5-26
6- 7	**Paving, Billings, Mont**	**5-12**
6- 7*	**Paving, Jackson, Miss**	**5-12**
6- 7	**Gravel road, Bloomfield, Ind**	**5-12**
6- 7	**Gravel road, Williamsport, Ind**	**5-12**
6- 7	**Macadam, Trenton, N. J**	**5-19**
6- 7	**Road, Monticello, Ind**	**5-19**
6- 7	**Road, Marion, Ind**	**5-19**
6- 7	**Roads, Wabash, Ind**	**5-19**
6- 7*	**Paving, Cape Girardeau, Mo**	**6- 2**
6- 7	**Road roller, Ft. Leavenworth, Kan**	**6- 2**
6- 7	**Curbing, Parnassus, Pa**	**6- 2**
6- 7	Paving, Paterson, N. J	6- 2
6- 7	Grading, Waterbury, Conn	6- 2
6- 8	Road, Harrisville, Pa	6- 2
6- 8	Paving, New York	6- 2
6- 8	**Road, Muncie, Ind**	5-19
6- 8	**Paving, Princeton, W. Va**	5-12
6- 8	**Gravel roads, Peru, Ind**	5-12
6- 8	Stone road, Concord, N. H	5-26
6- 8	Paving, New York	5-26
6- 8*	Paving, sewers, Prospect, Ohio	6- 2
6- 9	Gravel, New York	5-26
6- 9*	Paving, Hyde Park, Pa	5-26
6- 9	Roads, Bluffton, Ind	5-26
6- 9	Roads, Laporte, Ind	5-26
6- 9	**Road, Logansport, Ind**	5-12
6- 9	Macadam, Ft. Sam Houston, Tex	5-19
6-10	Roads, Cincinnati, Ohio	5-26
6-10	Road, Concord, N. H	6- 2
6-11	Macadam, Delaware, Ohio	6- 2
6-11	Road, Vincennes, Ind	5-19
6-13*	Road, Burlington, N. J	5-26
6-13	Grading, East Youngstown, Ohio	6- 2
6-13	Curb, Benwood, W. Va	6- 2
6-14	Paving, etc., St. Louis, Mo	6- 2
6-14	Sidewalks, Cleveland Heights, O	6- 2
6-14	State roads, Hartford, Conn	6- 2
6-15	Road, Ft. Barrancas, Fla	5-26
6-15	Roads, Peru, Ind.	5-26
6-15*	Street impvt., Freehold, N. J	5-26
6-15	Stone dust, New York	6- 2
6-18	Macadam, Delaware, Ohio	6- 2
6-20*	Grading, Canton, Ohio	5-26
6-20*	Paving, Marshalltown, Ia	6- 2
6-21	Paving, Billings, Mont.	5-26
6-23	Paving, Carrollton, Ohio	5-26
6-24	Sidewalks, Valparaiso, Ind	6- 2
6-30	Sidewalks, Brazil, Ind.	6- 2

Miscellaneous.

6- 3	**Pier, Colchester, Ont**	5-19
6- 3	**Pier work, Pentwater, Mich**	5-12
6- 3	Canal, *Ottawa, Ont	5-26
6- 3	Oiling road, Cincinnati, Ohio	5-26
6- 3	Dredging, etc., Boston, Mass	6- 2
6- 3	Wharf, Miscou Harbor, N. B	6- 2
6- 3	Canal impvt., Port Colborne, Ont.	6- 2
6- 4	Street sweepings (Garbage), New York	5-26
6- 4	Ditch, Anderson, Ind.	5-26
6- 4	Ditch, Washington, Iowa	5-26
6- 4	**Steel tanks, Wash., D. C**	5- 5
6- 6	**Anchors, Fort Totten, N. Y**	5- 5
6- 6	Riprap, Plymouth, Mass	5-19
6- 6	Pier, New York, N. Y	5-26
6- 6	Oils, grease, New York, N. Y	5-26
6- 6	Garbage disposal, etc. (Garbage.) McKees Rocks, Pa	6- 2
6- 7	Drainage, Forest City, Iowa	5-26
6- 7	Drainage, Waco, Tex	5-26
6- 7	Broken stone, screenings, New York, N. Y	5-26
6- 7*	Wharf, Richmond, Va	6- 2
6- 8	**Testing materials, Cleveland, O.**	5-19
6- 9	**Ditch, Council Bluffs, Iowa**	5- 5
6- 9	Ditch, etc., Burlington, Ia	6- 2
6- 9	Grates, New York	6- 2
6-10	Ditch, Mitchell, S. Dak	6- 2
6-10*	Garbage disposal (Garbage), Toledo, Ohio.	5-26
6-10	Dredging, New Orleans, La	5-26
6-13	Fire engine, New York	6- 2
6-14*	**Riprap, Wilmington, N. C**	5-19
6-15*	Foundations, pier extensions, Wheeling, W. Va	5-19
6-15*	**Drainage canals, Tallahassee, Fla.**	5- 5
6-15*	**Lock gates, Panama**	4-21
6-15	**Drain, Clarion, Iowa**	5-12
6-15	Wharf extension, Ft. Barrancas, Fla.	5-26
6-17*	**Dredging equipment, Philadelphia, Pa**	4-28
6-17	Wharf, Angers, Que	6- 2
6-18	Levee, Memphis, Tenn	6- 2
6-18	Refuse kiln (Garbage), Boston, Mass.	5-26
6-18	Seawall, Newport, R. I	5-26
6-20	Wharf extension, Sault Ste. Marie, Ont.	5-26
6-20	Harbor impvts., Michigan City, Ind	6- 2
6-20	Wire, rope, etc., Vicksburg, Miss.	6- 2
6-20*	Steel furniture, etc., Louisville, Ky	6- 2
6-23*	Breakwater, Newport, R. I	5-26
6-24*	Towboat, New Orleans, La	6- 2
6-27*	Dredging, New York	6- 2
6-27*	Steel lock gates, etc., Buffalo, N. Y.	5-26
6-27*	Ladder dredge, Panama	5- 5
6-29*	Bulkhead, etc., New York, N. Y.	5-26
6-30	Seawall, San Francisco, Cal	6- 2
7-25*	**Dams and canal, Porto Rico**	5-12

Examinations.

6- 8	**Inorganic Chemist, Philippines**	5-12
6- 8	**Bacteriologist and Pathologist, Philippines**	5-12
6- 8	Inspector of Meters, New York, N. Y.	5-26
6-14	Inspector Water-Pipe Laying, Boston, Mass.	5-26
6-15	**Surveyor, Philippines**	5-12
6-15	Geologist, Washington, D. C	5-19
7- 8	Electrician, New York, N. Y	6- 2
7-13	Junior Engineer, Wash., D. C.	6- 2
7-13	Asst. Engr., Wash., D. C	6- 2
7-13	**Examiner, Klamath Falls, Ore**	5-12

Plans and Specifications on File.

6- 4	Fire-protection system, etc., Boston, Mass.	(S.)	6- 2
6-10*	Garbage disposal, Toledo, O.	(S.)	5-26
6-11	Substation, Charleston, S. C.	(S.)	5-12
6-11	Nurses' quarters, New York	(S.)	5-12
6-14	Water main extensions, North Chicago, Ill.	(S.)	5-26
6-14	Heating plant, Wahpeton, N. Dak.	(P. & S.)	5-26
6-15*	**Drainage canals, Tallahassee, Fla**	**(P. & S.)**	**5- 5**
6-15*	**Foundations, pier extensions, Wheeling, W. Va**	**(S.)**	**5-19**
6-18	**Refuse kiln, Boston, Mass**	**(S.)**	**5-26**
6-18	**Seawall, Newport, R. I**	**(S.)**	**5-26**
6-21*	**Bridge work, St. Louis, Mo.**	**(P. & S.)**	**5-19**
6-25	**Foundation, Boston, Mass**	**(S.)**	**6- 2**
6-27*	**Steel lock gates, etc., Buffalo, N. Y.**	**(S.)**	**5-26**
6-28*	**Bridge, Winnipeg, Man.**	**(P. & S.)**	**5- 5**
7- 8	**Canal enlargement, Boise, Idaho**	**(S.)**	**5-19**

CURRENT PRICES OF ENGINEERING MATERIALS

Supplement to ENGINEERING NEWS, appearing in the First Issue of Each Month. New York, June 2, 1910.

PRICE CHANGES AND THE BUSINESS OUTLOOK.

Engineering construction in all parts of the country is being actively prosecuted with the notable exception of New York City. Less work is going on in and around New York than in several years. Reports of general trade conditions are mixed, some branches being exceedingly quiet. In the iron industry there is more business in every line than a month ago, but at the expense of prices. Pig iron is being produced at a faster rate than previous to the panic of 1907 and within 15% of the high record. The copper industry shows an improvement in the volume of business, but prices are lower. Manufacturers of electrical machinery are turning out more apparatus than ever before in history. The development of electrification schemes is especially active on the Pacific Coast. The machine tool trade has recovered from its lethargy, but business is not especially active. The cement industry is more prosperous than in two years. Many of the smaller mills that sold their entire product earlier in the year are endeavoring to buy round lots to supply their customers. The largest producers will be able, however, to supply any demand that is likely to arise. A feature not without interest is a slight recession in the price of lumber. Phenomenal activity is apparent in any trade related to the automobile industry.

There is employment for every laboring man willing to work. Freedom from strikes, which is apparent all over the country, is an indication that business is not especially active. The granting of higher compensation to railway employees has been followed by the announcement that freight and passenger tariffs will be increased. This matter, however, will be fought out in the courts.

Coincident with this are published statistics that the idle cars are larger than they have been any time since August last, numbering nearly 130,000. The successful flotation of bonds of American railways on the Continent will supply them with money urgently needed for improvements. Speculation, which has almost run riot in cotton and grains in this country and in rubber in Europe, has subsided and prices are much lower.

New railway construction includes several hundred miles of new line in North Dakota, and much work by the Hill and Harriman forces in Oregon. The Great Northern will also build a 350-mile extension in Montana. The Denver & Rio Grande, in conjunction with the Colorado & Southern, is building about 50 miles of double-track line. The Chicago, Burlington & Quincy plan numerous improvements in Colorado, Wyoming and Montana. The Barge Canal work in New York State is slowly going forward. The New York City water supply work is far ahead of schedule. It is expected that bids will soon be made for the new subways in New York City. An important project now being figured on includes 240 miles of canals to drain the Everglades in Florida.

American contractors have recently secured large and important work in foreign countries in competition with European interests. This includes upwards of 40 miles of reinforced concrete sewers in Havana, extensive dock improvements and coal handling machinery in Rio de Janeiro. A concession from the Haitian Government has been given to Mr. J. R. MacDonald to build several hundred miles of narrow gage road in Haiti. American financiers have obtained the right to furnish a part of the Chinese Railway loan.

LABOR.

In practically all lines of trade, labor is better employed than at any previous time this year. Especially is this true of construction lines, and in New York and vicinity every man who will work, with a pick and shovel, can find employment. The best grades of Italian workers receive $1.75 a day, while foremen are paid $2.25 to $2.50. They are very scarce even at this figure. Other foreign laborers command $1.50 to $1.65. Contractors have experienced considerable difficulty in securing steady men, as the Italians very quickly grasp the American idea of striking for higher wages and leaving when refused. In several cases of this kind, on Long Island, they have left because higher wages were refused and within the week returned anxious to obtain their old jobs at the old figures. Further from New York conditions are less satisfactory, the demands being far in excess of supply. It is interesting to note, however, in this connection that foreign laborers are more generally buying their tickets to destination at interior points, being advised by friends of higher wages in the interior. This has not been enough to affect in any appreciable way the labor market in those centers. In railway construction work in the West, labor is exceedingly scarce. The Hill and Harriman forces in Oregon are, through their contractors, unable to secure competent men even at $2.50 to $3.00 per day.

The railways in general have increased their wages, not only to section men and train employees, but also to station men. In the street railway lines, at many important centers, wages have been advanced to around 21 cts. per hour for the first year, advancing gradually to 25 cts. maximum for fourth-year employees. Labor bureaus in New York City tell of a marked shortage of machinists, carpenters are also scarce, and there is a fair demand for masons. Miners are practically unobtainable, and the same is true of other skilled laborers, such as derrick men and enginemen. While there has been more strike talk this Spring than before in years, the only serious labor controversy was in Philadelphia, which was settled last month. In other quarters, where the situation looked especially dark, wage increases have been made.

Some complaint is heard among the larger employers of labor that the railroads were too ready to advance the pay of their operatives, saying that it would have been better had the employees been allowed to tie up, for a few days, one system. This, of course, is only shifting the blame, for, while manufacturers in general are very willing to have some other manufacturers have the strike and do the fighting, they are reluctant to have it occur within the confines of their own yard. Another reason for this feeling may be even nearer home in that it apparently will bring an increase in the cost of transportation.

Steerage passengers arriving at the port of New York from Jan. 1 to May 20 inclusive numbered 444,337, compared with 406,402 in the corresponding time last year.

CEMENT, LIME AND BRICK.

PORTLAND CEMENT. — Improvements are noted all over the country, and it is significant to observe that some of the small producers of cement in the East, who were anxious to get their order books filled early in the year, are now endeavoring to buy large lots from the leading manufacturers. Of course, there is no danger of famine. No advance in price is anticipated, but the demand has increased rapidly in the last three months.

In the West conditions are steadily improving. Some of the mills in that territory are well sold up for the remainder of the year, and the outlook for business in Kansas, Texas, and practically all along the Mississippi River, is excellent. Prices are perhaps no firmer than a month ago. Larger consumers are more skeptical of buying from weak mills than formerly, particularly as a large dealer in a Metropolitan district bought and paid for a fair quantity of cement at a price considerably under the running quotation. This was done with the understanding that the cement should be shipped when desired. In the meantime, the company has failed, the dealer is out his money and the cement is still undelivered.

Prices continue without change and for delivery within lighterage limits of New York City, $1.43 per bbl. is quoted. In Philadelphia, $1.42; in Boston, $1.32; in Buffalo, $1.50.

Imported cement continues without change, Alsen's being quoted at $2.42, and Dyckerhoff's, $2.43.

NATURAL CEMENT.—The demand is probably better than it was earlier in the year, but it is not exceptional. Prices are unchanged at 80 cts. per bbl. delivered along side of dock, New York City.

LIME.—Business, although showing somewhat of an improvement compared with last month, is not up to the high record of a year ago. Apparently there is less lime being used per unit of construction than last year for, in other lines of material of this character, except crushed stone, the demand is well ahead of a year ago. Prices continue unchanged from last month. For large lots delivered New York City quotations are as follows: State common, per bbl., 75 cts.; Rockland-Rockport common, 92 cts.; Rockland-Rockport special, 320 lbs., $1.37; select finish, 350 lbs., net, $1.60; New Milford, $1.30. Hydrated lime for brick work is $6.50 per ton; for finishing, $9 per ton. These prices are for carload lots.

Adamant wall plaster is $6 per net ton delivered at the work.

BRICK.—Brick trade continues active, and prices, although fairly steady, are not high. In fact, such prices as those prevailing at present offer no inducement to the makes to add to their present facilities. On the other hand, however, there is a distinct inducement for builders to purchase brick now for the cost is down near the bottom, and it is felt that there could be only a slight recession, if any. Toward the middle of the month prices worked up slightly and Hudson River common was sold as high as $6.37½. Since then prices have receded slightly, and are now quoted at $6.00 to $6.25. Light hard brick are $4.50, and Raritan River brick are quoted at $5.75 to $6.25. The foregoing quotations are for cargo lots per thousand at the wharf.

Boston prices are unchanged at $7.00, and Chicago the same figure is quoted.

White enameled brick are in excellent demand, the unchanged price is $60 per M. for the American size (8¾ × 2¼-in. enameled surface by 4⅛-in. bed), and $70 to $75 for the English size (9 × 3-in. enameled surface by 4½-in. bed). Prices are f. o. b. Perth Amboy.

PLASTER BLOCKS.—For large lots prices are as follows:

	Weight lbs. per sq. ft.	Price cts. per sq. ft.
2-in.	7	6
3-in.	8½	6¼
4-in.	11	7¼

These blocks are made 32-in. long by 13½-in. wide containing 3 sq. ft. of surface. The 2-in. blocks are solid, but the others are hollow.

Plaster boards ⅝-in. thick are 16 cts. per sq. yd.

STONE.

BLUESTONE.—Business is fair, but prices continue low. There is little to stimulate new work, for the greatest amount of flagging work is being done on real estate developments where the cheaper form of concrete walks can be laid at less than the cost of bluestone. This, of course, only applies to real estate developments. They are made to sell, rather than for permanent improvements.

Prices continue without change from last month and for delivery either along side of dock or f. o. b. cars, New York City, are as follows: Flagging, 6 cts. per sq. ft. per in. of thickness; flagging, 2½ to 3-in. thick that will pass New York City specifications, 18 to 19 cts. per sq. ft. Some concessions, however, have been made and stone of this character has sold at 17 cts.

Sewer bottoms 5 ft. sq. and 3-in. thick are sold at 25 cts. per sq. ft. Curbing, 5 × 16-in., is 35 cts., and 5 × 24-in. by 5-in. thick is 60 cts., and 6-in. thick is 72 cts. per line ft.

Promiscuous shapes of building and foundation stone sell at 70 to 74 cts. per cu. ft.

GRANITE.—Activity continues in this line of trade, and the orders taken recently have been of fair size. Prices continue without change at 40 to 45 cts. per cu. ft. for promiscuous shapes or run of quarry. Rockport granite is 45 cts.

Pink Milford granite is $1 per cu. ft. for promiscuous shapes.

LIMESTONE.—The price continues unchanged, and for large lots of limestone delivered along side of dock, New York City, 85 cts. per cu. ft. is named. Dressed stone is from $1.25 to $1.50 per cu. ft.

Sandstone in the ropgh is 80 cts. to a $1 per cu. ft.

INTERIOR STONE.—Dressed stone for interior work, ready to be placed in building, varies largely according to the size of the job and character of the work. In general slate flooring 1-in. thick can be had at 20 cts. per sq. ft. for the common or ribbon variety. Clear black sells at 35 to 40 cts., and the same price is asked for Vermont. Combination of slate and marble flooring is 30 cts. per sq. ft.

Marble flooring finished ready to lay of Vermont marble is 50 to 70 cts. per sq. ft.; Italian marble, 70 to 90 cts. Tennessee marble can be had at 65 cts. Ordinary stair work, such as slate steps, are quoted at 24 cts. per sq. ft.

CRUSHED STONE, SAND AND GRAVEL.

CRUSHED STONE.—The buyer has the advantage in this market. While contracts have been made for future delivery on both New York City work and considerable road work in this State, consumers are not asking for deliveries and consequently stocks are piled up at the crushers. While prices have not receded to any great extent, this is largely because there is no real market, and a concession of even 10 cts. a yard would probably fail to bring business. For 1½-in. stone 85 to 95 cts. is quoted; for ¾-in., 95 to $1.00, and for screenings, 85 to 90 cts. These prices are per cubic yard, delivered alongside of dock, New York City.

SAND.—Some of the largest dealers in sand in the vicinity of New York report that business during March and April exceeded any two months in their history. These may be isolated cases, but there is undoubtedly an excellent demand for sand. Prices continue without change. Standard grades of Long Island washed sand are quoted at 35 cts. per cu. yd. delivered along side of dock.

White quartz sand is 58 cts. to 62 cts. per cu. yd. and white quartz grit is 75 cts. per cu. yd.

GRAVEL.—Business is excellent. Never was so much gravel used for concrete as at present, and should the demand continue, there seems to be no doubt but that prices will work higher and perhaps ultimately as high as crushed stone. Washed gravel is selling at 75 cts. to 80 cts., delivered along side of dock in cargo lots of 500 cu. yds.

White quartz roofed gravel is $1.25 to $1.35 per net ton.

IRON AND STEEL.

PIG IRON.—The market during the month has been a waiting one, but conditions are now more favorable than for several weeks. In the East, particularly, there are large inquiries pending. They are not only large by comparison with those received recently, but really call for good sized tonnages. In the Middle West conditions are not nearly as satisfactory, some of the furnaces, which, by their location, are practically compelled to sell in a restricted locality, are actively competing for even small orders of a few hundred tons. In the Chicago district there is a waiting attitude by both producers and consumers, the former believing that the restriction in output will bring buyers into the market and the latter being content to wait and buy at higher figures if necessary, if they can get their iron as low as other users. Apparently, the price of $12 for No. 2 Southern iron in Birmingham has been broken, as some sellers are now willing to accept for delivery during the first half of the year—only four weeks—$11.50. For the last half, the price of $12 holds. The blowing out of furnaces has, perhaps, been too widely heralded, and, although furnaces have been allowed to grow cold with a startling rapidity, production is now about 85% of the high record, surely not a very startling exhibit when it is known that production is equal to if not less than consumption. Steel-making irons have gone slightly lower, but the attitude of the principal producer in blowing out a larger proportion of furnaces than any other tends to stiffen the market.

Prices are, as stated, lower in all quarters and for lots of 100 gross tons and over the following quotations prevail: Cincinnati Southern foundry No. 1, $15.25 to $15.75; Southern foundry No. 2, $14.75 to $15.25; Southern foundry No. 4, $14.25. In Philadelphia, Eastern Pennsylvania No. 2 X foundry, $17 to $17.25; Eastern Pennsylvania No. 2, plain foundry, $16.50 to $17. In Chicago, Northern foundry No. 2 is $17 to $17.50, and Southern No. 2, $16.35 to $16.85. In Pittsburg, Bessemer is $17.30, including the 90 ct. freight rate from the valley.

STEEL RAILS.—Business continues rather quiet and the leading mills of the United States Steel Corporation are running about 50% of capacity. At this rate of production they have orders that will keep them employed for two months. In Chicago a good demand is reported and numerous orders have been taken for small roads. These, however, do not aggregate any considerable tonnage. Export business is being eagerly sought, but no especial contracts have been made during the month.

Quotations are without change, the following prices being named for lots of 500 tons and over, carload lots being held at 50 cts. a ton additional; these quotations are f. o. b. mill: Standard sections, 50 to 100-lb., $28; 40 to 45-lb., $27; 30 to 35-lb., $27.50 to $28.50; 20 to 25-lb., $27.25 to $28.25; 12 to 14-lb., $29; 8 to 10-lb., $32. Relaying rails can be had at $21 to $22 in New York, but in Chicago are $24 to $25.

TRACK SUPPLIES.—Business in this department is better than the rail line. Chicago reports a very fair demand. In Pittsburg there is quite an inquiry for angle bars and shipments are being made rapidly on old contracts. One reason why track supplies were not bought earlier in the year is that the Winter was so hard on track that practically all the time of the section force was devoted to getting track in shape without making any improvements.

Prices continue without change. Standard railway spikes, 4½ × 9/16-in. and larger, are quoted at 1.80 to 1.85 cts. per lb. Boat spikes are 1.80 cts. base. These prices are for carload lots and larger f. o. b. mill, 10 cts. per 100 lbs., advance being charged for small lots. Track bolts with square nuts are held at 2.30 to 2.50 cts. per lb., and angle bars 1.50 to 1.55 cts. per lb. in Chicago and Pittsburg.

STRUCTURAL SHAPES.—Fabricated work is being taken at extremely low figures and keen competition is shown for small orders. Some of the bridge work that was refused a few weeks ago is now being refigured. The prospects are that lower prices will be named. Fabricators and steel mills are very much interested in the new work that will come out for stations and yard improvements in Chicago, Kansas City and St. Louis. This will call for at least 100,000 tons of material. The New York, New Haven & Hartford has purchased 4,000 tons of bridge work. A future contract which will be watched is the new subway for New York City, which will call for at least 100,000 tons of shapes. Numerous small bridges are likewise contemplated. In Chicago it is reported that there is more work in prospect than for a long time, and in New York it is estimated that 40,000 to 50,000 tons of bridge work is in sight, irrespective of subway construction. Numerous buildings in various parts of the country call for contracts of less than 1,000 tons, but no especially large buildings have been announced during the month. An estimate by "The Journal of Commerce" places the pending contracts at 160,000 tons on which tenders have been made.

Prices continue without change and are quoted as follows in cts. per lb. f. o. b. Pittsburg: I-beams and channels, 3 to 15-in., 1.50 to 1.55; over 15-in., 1.65; H-beams over 8-in., 1.75; angles, 3 to 6-in., 1.60; over 6-in., 1.65; zees over 3-in., 1.60; deck beams and bulb angles, 1.80; hand rail tees, 2.80.

Chicago store prices in cts. per lbs. are as follows: Angles, 3 to 6-in., 2 to 2.10; over 6-in., 2.10 to 2.20; I-beams and channels base, 2.

Prices from store in San Francisco are without change at 2.70-ct. base.

OLD MATERIAL.—Buyers are still indifferent to the market, and consumption is very light. In some quarters considerable material is said to be pressing on the market, and it is felt that should any unusual quantity appear for sale buyers will be reluctant to bid on it except at much lower figures. Such materials as heavy steel scrap are now lower than they were a year ago. Foundry stock, however, is higher. In New York City and vicinity prices are as follows per gross ton: Re-rolling rails, $12.50 to $13; heavy melting steel scrap, $12 to $12.50; No. 1 yard wrought, $12.50 to $13; No. 1 railroad wrought, $14 to $14.50; pipes and flues, $12 to $12.50; machinery cast broken up, $12.50 to $13; stove plate, $9.50 to $10.

In Chicago the situation is somewhat better, the demand being more nearly equal to the supply. The following prices rule per gross ton: Re-rolling rails, $17 to $17.50; steel scrap, $13.50 to $14. Four such mashort lengths, $15 to $15.50; heavy melting terials as are sold by the net ton, prices are as follows: Miscellaneous railroad wrought, $11.75 to $13.25; machine shop turnings, $8 to $8.50; cast and mixed borings, $5 to $5.50; No. 1 cast scrap, $13 to $13.50; pipes and flues, $9.50 to $10; railroad malleable, $12.50 to $13; agricultural malleable, $11.50 to $12.

In Pittsburg lower prices are the rule, but a thing that has given some steadiness to the market there is the covering of short sales made several months ago. It is also said that a good deal of bundled steel scrap is pressing on the market to find sale. Quotations per gross ton are as follows: Rerolling rails, $17; No. 1 foundry cast, $15.50 to $15.75; No. 2 foundry cast, $13.50 to $14; old grate bars, $10 to $10.25; old car wheels, $14.50 to $15; cast iron borings, $8 to $8.25; machine shop turnings, $9.50 to $9.75.

CAST-IRON PIPE.—Activity continues in this line perhaps more than in any other department of the heavy iron trade. As has been frequently noted, there is a continuation of the demand for pipe from small municipalities and private corporations. The leading makers are well supplied with orders for several months, and in spite of further recessions in pig iron prices show no disposition to shade quotations for pipe; in fact, there is no necessity for so doing, for orders are well ahead of production and probably sufficient to keep the foundries going at the present rate for some months. The largest work to come out is a 9,000-ton order for Brooklyn, the city having let the contract last week. Newark, N. J., is also in the market for 1,000 tons, and some additional pipe will be required in Chicago. The gas companies have been active buyers, particularly in the North. As stated, quotations are unchanged from last month, and we quote f. o. b. cars, at foundry, as follows: In Birmingham 4 to 6-in., $24; 8 to 12-in., $23; over 12-in., $22. In Chicago, 4-in. is $28.50; 6 to 12-in., $27.50; 16-in. and larger, $26.50. For New York City delivery, 6-in. is quoted at $25.50 to $26. Gas pipe is sold $1 a ton higher in all markets. Specials are from $50 to $60 per net ton.

PLATES.—A distinct improvement is noted in the plate trade, and the mills are fairly active. Some new boats are building, and several are projected for the coastwise trade. The Panama Canal lock-gates called for a large tonnage of plates. The greatest boom to the plate trade, however, is the orders for cars that have been placed recently. These amount to a large number, but were only taken after being refigured. Lower prices were named—the price of plates being cut to 1.50 cts. on May 12th. This was the cause of the good business reported.

The revised quotations, f. o. b. mill, are as follows in cts. per pound; ¾-in. thick up to 100-in. wide, 1.50 to 1.55 cts.; ¼ to 3/16-in. thick, 1.60 to 1.65 cts.; 3/16-in. and heavier than No. 8 gage, 1.65 to 1.70 cts.; No. 8 and No. 9 gage, 1.75 to 1.80 cts.

In Chicago store prices are 1.95 to 2 cts. base.

STEEL CASTINGS.—Business is exceedingly active, the largest manufacturers being unable to supply the demand with the promptness their customers desire. With the locomotive and car orders in the market, it is probable that this demand will be greater instead of less. Prices are without change. Open hearth castings weighing from 100 to 500 lbs. are 3.50 to 5 cts. per lb. Crucible castings of approximately the same weight are 7.75 to 9 cts. per lb.

RIVETS.—Business is more active than a month ago, but there is no difficulty in securing shipments promptly. The large number of car orders taken in the past fortnight indicate that business will be very active in the near future. Prices continue without change, as follows: Structural rivets, ¾-in. and larger, 2.15 cts., base; cone head boiler rivets, ¾-in. and larger, 2.25 cts., base; ⅝-in. and 11/16-in. take an advance of 15 cts., and ½-in. and 9/16-in. take an advance of 50 cts.; in lengths shorter than 1 in., also take an advance of 50 cts. The above prices are absolutely minimum on contracts for large lots, makers charging the usual advance of $2 to $3 a ton to the small trade.

WIRE ROPE. — Leading manufacturers made changes in their list of wire rope, which are printed in the accompanying tables. The discounts to larger consumers are unchanged at 42½ and 2½% from list for galvanized, and 50 to 2½% from list for plain. Net prices for wire rope are as follows:

	Price per ft.		
Diameter.	Plow steel.	Crucible steel.	Plow steel.
2¾	$1.05	$1.24	$1.46
2½	.85	1.05	1.22
2	.57	.65	.76
1¾	.44	.54	.64
1½	.32	.39	.45
1¼	.23	.28	.32
1	.15	.18	.21
¾	.10	.11	.13
⅝	.07	.09	.10
½	.06	.07	.07

FREIGHT RATES.—The freight rates, on finished steel products, from the Pittsburg district, including plates, structural shapes, merchant steel and iron bars, pipe, fittings, plain and galvanized wire, nails, rivets, spikes and bolts (in kegs), black sheets (except planished), chain, etc., are as follows, in cts. per 100 lbs.: Albany, 16; Buffalo, 11; Boston, 18; Baltimore, 14½; Canandaigua, 13½; Cleveland, 10; Columbus, 12; Cincinnati, 15; Chicago, 18; Harrisburg, 14½; Louisville, 18; New York, 16; Norfolk, 20; Philadelphia, 15; Rochester, 11½; Richmond, 20; Scranton, 15; St. Louis, 23; Washington, 14½.

PILING, SHEET STEEL.—Business continues quiet, and prices are unchanged at 1.60 to 1.70 cts. per lb., f. o. b. Pittsburg.

CASTINGS, GREY IRON.—Building castings are not as active as a month ago, and competition is perhaps more keen. The general price for columns and column caps is 1.75 to 2 cts. per lb. For work of any magnitude such as a large loft building, 1.65 cts. could be done. Stair work is 2 to 2.25 cts. per lb. Manhole covers, sewer castings and general castings of large size, in the rough, are 1.50 to 1.75 cts. per lb.

WIRE ROPE.—Several changes were made in the list price of wire rope effective May 1. The new lists are as follows:

WIRE ROPE.—LIST MAY 1, 1910.—STANDARD HOISTING ROPE.—19 WIRES TO THE STRAND.

		Per foot			
No.	Diameter.	Iron.	Cast steel.	Extra strong crucible steel.	Plow steel.
00	2¾	$1.70	$2.10	$2.55	$3.00
0	2½	1.40	1.75	2.10	2.50
1	2¼	1.17	1.44	1.70	2.00
2	2	.95	1.16	1.34	1.58
3	1¾	.80	.90	1.10	1.30
4	1⅝	.65	.77	.94	1.08
5	1½	.57	.66	.80	.93
5½	1⅜	.49	.56	.68	.79
6	1¼	.40	.46	.56	.65
7	1⅛	.33	.38	.46	.54
8	1	.26	.31	.37	.43
9	⅞	.20	.24	.29	.34
10	¾	.16	.19	.22	.26
10¼	⅝	.12	.14	.16½	.19
10½	9/16	.10	.12	.14	.16
10¾	½	.08½	.11	.12½	.14
10a	7/16	.07½	.10	.11½	.13
10b	⅜	.07	.09½	.11	.12½
10c	5/16	.06¾	.09¼	.10¾	.12¼
10d	¼	.06½	.09	.10½	.12

TRANSMISSION OR HAULAGE ROPE.—7 WIRES TO THE STRAND.

		Per foot			
No.	Diameter.	Iron.	Cast steel.	Extra strong crucible steel.	Plow steel.
11	1½	$0.51	$0.60	$0.75	$0.90
12	1⅜	.43	.51	.64	.76
13	1¼	.36	.43	.53	.62
14	1⅛	.30	.36	.44	.51
15	1	.24	.29	.35	.41
16	⅞	.18½	.22½	.27	.32
17	¾	.14	.17	.20	.24½
18	11/16	.12	.14½	.17	.21
19	⅝	.10	.12	.14¼	.17½
20	9/16	.08¼	.10	.12	.14½
21	½	.06½	.08	.09½	.11½
22	7/16	.05½	.06½	.07¼	.09
23	⅜	.04½	.05½	.06	.06¾
24	5/16	.03¾	.04½	.05½	.06
25	9/32	.03¼	.04	.05	.05½

GALVANIZED WIRE ROPE.—7 OR 12 WIRES TO THE STRAND.

		Per foot	
Circumference.	Approximate diameter.	7 wires to strand.	12 wires to strand.
5½	1¾	$0.44	$0.46
5¼	1 11/16	.41	.43
5	1⅝	.38	.40
4¾	1½	.35	.37
4½	1 7/16	.31½	.33½
4¼	1⅜	.28½	.30½
4	1¼	.25	.26½
3¾	1 3/16	.22½	.24
3½	1⅛	.19½	.21
3¼	1 1/16	.17½	.18½
3	1	.15	.16
2¾	⅞	.13	..
2½	13/16	.11	..
2¼	¾	.09	..
2	⅝	.08	..
1¾	9/16	.07	..
1½	½	.06	..
1¼	7/16	.05	..
1⅛	⅜	.04½	..
1	5/16	.03½	..
		5 strands, 7 wires each.	
⅞	9/32	.03	..
¾	¼	.02½	..
⅝	7/32	.02¼	..
½	3/16	.02	..

GALVANIZED STEEL HAWSERS.
12 Wires to the Strand.

	Approximate diameter.	Per foot.
6½	2 1/16	$0.78
6¼	2	.72
6	1 15/16	.67
5¾	1 13/16	.62
5½	1¾	.57
5¼	1 11/16	.53
5	1⅝	.49
4¾	1½	.44
4½	1 7/16	.41
4¼	1⅜	.38
4	1¼	.35
3¾	1 3/16	.33
3½	1⅛	.31

ROOFING, CORRUGATED.—In the Central West consumers are taking corrugated roofing with a great deal of liberality. In the East, too, the demand is relatively much better than that for sheets. At the same time, the mills are in position to supply regular material on short notice, and the shipping schedule is only two to four weeks behind specifications. The keenness for orders displayed in other lines of finished product is not noticeable in this line.

Quotations are unchanged from last month and for 100 sq. ft. of roof surface are as follows: Carloads, Pittsburg, No. 28 painted, $1.70; No. 28 galvanized, $3. From store, New York, No. 24 painted, $3.85; galvanized, $4.80; No. 26 painted, $2.95; galvanized, $4; No. 28 painted, $2.60; galvanized, $3.75.

ROOFING, TIN PLATE.—This is the most active industry of any of the finished lines of steel. The mills are working full time and are shipping material as fast as it is made. Of course, prospects for an excellent canning season are responsible for this, yet it is well known that the tin plate industry is a steady one. It is felt, on the other hand, that later in the year orders will be very light, and on account of the new mills which have been built there may be some active competition. The terne plate trade is relatively quiet. The terne plates used for roofing are sold by the box of 112 sheets. Store prices in New York City are $8.50 per box of IC, 20 × 28-in. plates, with an 8-lb. coating. Plates of the same size with a 15-lb. coating, are $10.40; 20-lb. coating, $13, and 40-lb. coating, $16.50.

SHEETS.—Shading of the prices to the extent of $2 to $3 a ton continues, and the independent mills are aggressively going after business. A few of the largest producers have contracts on their books which will keep them busy for the next three or four months. On the other hand, supplies in the hands of jobbers and the largest consumers are, to say the least, excessive, and until these stocks are moved no new buying can be expected.

Prices for mill shipments of carload lots are as follows:

	Cts. per lb.	
	Black.	Galvanized.
Nos. 3 to 8	1.70	...
Nos. 9 and 10	1.75	...
Nos. 11 and 12	1.80	...
Nos. 13 and 14	1.85	2.50
Nos. 15 and 16	1.95	2.60
Nos. 17 to 21	2.20	2.75
Nos. 22 and 24	2.25	2.90
Nos. 25 and 26	2.30	3.10
No. 27	2.35	3.30
No. 28	2.40	3.50

Store prices Chicago are as follows:

	Cts. per lb.	
	Black.	Galvanized.
No. 10	2.30	3.25
No. 12	2.35	
No. 14	2.40	
No. 16	2.50	3.35
Nos. 18 and 20	2.85	3.40
Nos. 22 and 24	2.90	3.55
No. 26	2.95	3.70
No. 27	3.00	3.95
No. 28	3.10	4.15
No. 30	3.30	4.55

COKE.—The lower prices for coke brought business. Some contracts have recently been made for 5,000 tons monthly for the balance of the year on the basis of $1.75 for furnace coke. Another contract for 9,000 tons was closed at $1.80. Spot shipments of furnace coke are held at $1.70 to $1.75, while second half commands $1.80 to $1.85. This is for coke containing less than 1% sulphur. Foundry coke is slightly easier, and 72-hour Connellsville foundry is sold at $2.25 to $2.50.

NAILS.—The demand for nails in the West is good. In the East, too, there is fair inquiry. The mills, however, are able to supply the demand without any trouble. Prices per 100 lbs. are without change, as follows: In carload lots to jobber, $1.80; to retailers, $1.90; less than carloads to jobbers, $1.90; to retailers, $2. In New York small lots are sold at $2.10. Cut nails are quoted $1.85 base Pittsburg and $2.10 base New York store.

WIRE.—Fence wire is moving rapidly, although the railroads are not as large producers as it was expected they would be. General farming communities, however, are buying wire in larger lots than ever before. Stocks are not at all large, still there is no shortage.

The base prices, to retailers f. o. b. Pittsburg, are as follows: Carloads, annealed, $1.70; galvanized, $2. Less than carloads, annealed, $1.80; galvanized, $2.10.

Barb wire painted is $1.95 for carloads, and $2 for smaller quantities; galvanized is $2.20 for carloads and $2.30 for small lots.

Staples are $2.43, Chicago, to retailers in less than carload lots. All of these prices are per 100 lbs.

MERCHANT PIPE.—The price of merchant pipe was cut $2 a ton on May 18, and the lower quotations brought business. The present discounts on steel merchant pipe are 78% on ¾ to 6-in. black; 68% on ⅜ to 6-in. galvanized; 72% on 7 to 12-in. black, and 37% on 7 to 12-in. galvanized. The chief business taken has been for oil pipe lines and several good-sized contracts have been closed. In addition, the Merchants' Light & Heat Co. is in the market for 10 to 15 miles of 10-in., and the same length of 12-in. pipe. A 50-mile line of 20-in. pipe is being figured on for the Ohio Fuel & Supply Co. The Santa Fe will build in California a 45-mile line of 6-in. pipe. Consumers of small-sized pipe are also buying with more freedom than formerly. At the new discounts the net prices of pipe are as follows in cents per foot, f. o. b. mill:

	Steel Pipe in Cts. per ft. f. o. b. Mill.	
	Black.	Galvanized.
¾-inch	2.53	3.68
1 -inch	3.63	5.28
1¼-inch	4.95	7.20
1½-inch	5.94	8.64
2 -inch	7.92	11.52
2½-inch	12.67	18.30
3 -inch	16.61	24.16
4 -inch	23.76	34.56
5 -inch	32.90	46.30
6 -inch	42.36	60.16
7 -inch	65.80	101.05
8 -inch	70.00	107.50
9 -inch	95.20	146.20
10 -inch	112.00	172.00
11 -inch	126.00	193.50
12 -inch	137.20	210.70

SWEDISH STEEL.—While the importers were complaining of a dearth of material a month ago, now the supply are large and they are able to ship promptly from stock. In Sweden, too, conditions are much better, and it is possible to obtain odd sizes on short notice. Prices continue without change.

Drill steel, either round, hexagonal or octagen, is 6 cts. per lb. for all sizes ⅝ to 2 ins. For sizes 2⅛ to 3 ins. 7 cts. is quoted and 3⅛ to 4 ins. is 7½ cts.

Hollow drill rod is held at 12½ to 15 cts. for the imported.

Anvils of Swedish steel are held at 9 to 9½ cts. per lb. They weigh from 80 to 600 lbs.

SWITCH POINTS.—Business is better than a month ago. The following prices are quoted f. o. b. mill for switch points in lots of ten or more pair: For 60-lb. rail, 10-ft. points, $16.25; 15-ft. points, $22.50; for 70-lb. rail, 10-ft. points, $18; 15-ft. points, $25; [illegible] lb. rail, 10-ft. points, $25.50; 15-ft. points, $27.75; for 90-lb. rail, 15-ft. points, [illegible] for 100-lb. rail, $33.50. All of the above [illegible] furnished with three rods, except the [illegible] points for 60 or 70-lb. rail, which have [illegible] two.

BARS AND MERCHANT SHAPES.—[illegible]ness shows some improvement, but th[illegible] room for it. Prices are without change, as follows:

	Cts. per lb.
1 to 1⅞-in. round and square	[illegible]
1½ to 4-in. × ⅜ to 1-in	[illegible]
1½ to 4-in. × ¼ to 5/16-in	[illegible]
Rods—⅝ and 11/16 round & square	[illegible]
Angles:	
3-in. × ¼-in. and larger	[illegible]
3-in. × 3/16-in. and ⅛-in	[illegible]
1½ to 2½-in. × ⅛-in	[illegible]
1½ to 2¾-in. × 3/16-in. & thicker	[illegible]
1 to 1¼ × 3/16-in	[illegible]
⅞ × ⅛-in	[illegible]
¾ × ⅛-in	[illegible]
⅝ × ⅛-in	[illegible]
½ × 3/32-in	[illegible]
Tees:	
1-in.	[illegible]
1¼-in.	[illegible]
1½ × 2½ × ¼-in	[illegible]
1½ × 2½ × 3/16-in	[illegible]
3-in. and larger	2.18
Beams	2.10
Channels, 3-in. and larger	2.10
Bands—1½ to 6 × 3/16 to No. 8	[illegible]
Norway bars	3.60
Bessemer machinery, Steel	1.90
Cast steel, base	7.00
Special cast steel, base	14.00 to 15.00

LAG SCREWS.—Prices continue unchanged from last month. They are sold at a discount of 75 and 10% from list. Net prices are as follows:

	Price per 100		
	¼-inch.	¾-inch.	1-inch.
3½-inch	$1.17	$2.40	$5.00
4 -inch	1.25	2.55	5.25
4½-inch	1.33	2.70	5.50
5 -inch	1.40	2.85	5.80
6 -inch	1.58	3.20	6.40
7 -inch	1.73	3.50	7.00
8 -inch	1.82	3.85	7.60
9 -inch	2.05	4.10	8.20
10 -inch	2.25	4.45	8.75
11 -inch	2.40	4.70	[illegible]
12 -inch	2.60	5.00	9.90

CHAIN.—Manufacturers of chain report business somewhat quieter than a month ago. Orders are being received at perhaps 75% of the old high record. Prices are without change per 100 lbs. f. o. b. Pittsburg, as follows.

Sizes in inches.	Proof.	BB.	BBB.
3-16	$8.25	$9.50	$10.00
¼	5.70	6.95	7.45
5-16	4.70	5.95	6.45
⅜	4.15	5.40	5.90
7-16	3.85	5.10	5.60
½ and 9-16	3.65	4.90	5.40
⅝	3.55	4.80	5.30
¾	3.45	4.70	5.20
⅞	3.35	4.60	5.10
1	3.25	4.50	5.00
1¼ and 1⅛	3.35	4.60	5.10

Hand-Made Chain.

Size in inches.	BBB crane chain.	BBB crane, dredge hoisting or steam shovel hoisting chain.	Special "Warwick" crane, hoisting steam shovel hoisting and dredge hoisting chain.	Special "Trident" crane, steam shovel hoisting and dredge hoisting chain.
⅝	$7.95	$8.20	$9.15	$9.15
¾	7.15	7.45	8.45	8.45
⅞	7.67	6.90	7.95	
1	6.15	6.40	7.45	
1⅛	5.75	5.95	6.90	
1¼	5.65	5.90	6.85	
1⅜ to 1⅞	5.55	5.75	6.80	

SPIRAL RIVETED PIPE.—Prices continue unchanged from the last report. The prices given below are f. o. b. factory, freight equalized, with New York City being figured at a discount of 50, 10 and 10% from list. They are for orders amounting to about $250. For large orders, of several carloads, prices are from 12½% to 20% cheaper.

		Price per 100 ft. With bolted joints complete.		
Diameter in ins.	*Thickness of steel, Birmingham wire gage.	Plain.	Asphalted.	Galvanized.
3	20	$12.80	$14.21	$20.70
4	18	19.76	21.48	30.74
5	18	23.49	25.70	37.14
6	16	33.05	35.76	49.73
7	16	37.58	40.76	56.82
8	16	43.17	46.80	65.00
9	16	50.06	54.10	74.22
10	14	66.42	71.08	96.15
11	14	71.20	76.57	102.24
12	14	83.75	89.15	118.32
13	14	89.67	96.55	127.98
14	14	99.14	105.51	138.85
15	14	108.05	114.89	151.92
16	14	117.53	124.82	166.58
18	12	167.43	175.95	226.44
20	12	183.79	193.30	248.39
22	12	200.48	210.64	269.21
24	12	219.92	231.07	293.99
26	10	280.26	292.41	370.78
28	10	301.32	314.89	395.37
30	10	324.81	339.15	430.64

*Made in both lighter and heavier gages at corresponding differences in price.

FROGS.—For mill shipments, of ten or more, prices are as follows: Bolted frogs No. 7, for 60-lb. rail, $15; for 70-lb. rail, $16.50; for 80-lb. rail, $18; No. 8 frogs for 90-lb. rail, $21; for 100-lb. rail, $23. Plate frogs No. 7, riveted to ⅝-in. plate for 60-lb. rail, $18; for 70-lb. rail, $20; for 80-lb. rail,

$21.5[illegible] No. 8 frogs bolted to a ¾-in. plate for [illegible]-lb. rail are $25.50; for 100-lb. rail, $27.5[illegible]

BOLTS.—Some new business has appeared. The discount on common carriage bolts, to the retail trade and larger consumers, is 70 and 7½% from list, on bolts ⅜ × 6 ins., and smaller. The lowest price is 65 and 5% discount for larger and longer bolts. Net prices are as follows:

Length in inches.	Diameter in inches—Net price per 100. ⅜	½	¾
4	$0.74	$1.22	$2.86
5	0.83	1.36	3.15
6	0.92	1.52	3.50
7	1.22	1.65	3.75
8	1.34	1.80	4.25
9	1.45	1.95	4.50
10	1.55	2.20	4.75
12	1.75	2.40	5.25
14	1.90	2.70	5.50
16	2.05	2.85	6.25
18	2.40	3.25	7.20
20	2.60	3.50	7.75

REINFORCING MATERIAL.

TRIANGULAR MESH.—The demand continues excellent. Large orders have been taken for all kinds of reinforcing material. It is comparatively easy, however, to obtain prompt shipments. Prices are without change as follows:

Price per 100 sq. ft.

Style No.	Cross sec. area per ft. width.	Carload lots.	Smaller quantities.
4	.102	$1.03	$1.25
5	.077	.82	.99
6	.058	.65	.78
7	.041	.50	.61
23	.170	1.73	2.08
24	.142	1.48	1.80
25	.124	1.32	1.60
26	.110	1.20	1.45
27	.085	.98	1.19
28	.066	.81	.98
29	.049	.67	.81
31	.261	2.55	3.08
32	.225	2.20	2.67
33	.196	1.96	2.38
34	.146	1.51	1.82
35	.109	1.20	1.45
36	.075	.89	1.07
38	.380	3.62	4.38
39	.325	3.12	3.77
40	.283	2.74	3.30
41	.208	2.08	2.52
42	.151	1.58	1.92
43	.101	1.13	1.36

This material is made in regular widths of 18, 22, 26, 30, 34, 38, 42, 46, 50, 54 and 58 ins. Standard lengths of rolls are 150, 300 and 600 ft. Cutting to special length is charged extra.

BARS, CONCRETE REINFORCING.—Continued rumors are heard regarding concessions in the price of bars. It is undoubtedly true that the agricultural implement makers have been able to secure bars much cheaper than formerly, but no order for concrete reinforcing material has been large enough to thoroughly test the market. Then, too, the demand for concrete bars is fairly active, and perhaps it would be more difficult to secure concessions for such work than the agricultural implement makers have been able to secure for their requirements. The New York subway will probably require 50,000 tons of deformed bars. As stated, some prices as low as 1.45 cts. Pittsburg have been named, but the general price is 1.50 cts. The net price of bars, according to the standard list, are as follows:

	Cts. per lb. Plain.	*Deformed.
¾-inch and larger	1.50 to 1.60	1.55 to 1.65
⅝-inch	1.55 to 1.65	1.60 to 1.70
½-inch	1.60 to 1.70	1.65 to 1.75
⅜-inch	1.75 to 1.85	1.80 to 1.90
¼-inch	2.00 to 2.10	2.05 to 2.15

Bar from stock Pittsburg are usually cut to the required length without extra charge. Prices are as follows:

	Cts. per lb. Plain.	*Deformed.
¾-inch and larger	1.70 to 1.80	1.80 to 1.90
⅝-inch	1.75 to 1.85	1.85 to 1.95
½-inch	1.80 to 1.90	1.90 to 2.00
⅜-inch	1.95 to 2.05	2.05 to 2.15
¼-inch	2.20 to 2.30	2.30 to 2.40

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*The price of deformed bars varies according to the shape and some are held much higher than these prices.

Twisted bars are held at an advance of 10 to 25 cts. over plain bars.

The base price on plain bars from store, Chicago, is 2 to 2.10 cts.

EXPANDED METAL. — Business is very good, and probably up to that of a month ago. The following table of prices are for small lots from the warehouse, either New York or Pittsburg. Material concessions, however, will be made for large orders.

Mesh, ins.	Gage (Stubs).	Section in sq. in. per ft. width.	Weight, in lbs., per sq. ft.	Size of Standard Sheets in ft.	Price per sq. ft. f. o. b. New York.
½	18	.209	.74	8 × 3 or 6 ft.	5.5
¾	13	.225	.80	6 × 8 or 12 ft.	6.2
1½	13	.207	.70	4 × 8 or 12 ft.	5.5
2	12	.166	.56	5 × 8 or 12 ft.	4.8
3	16	.083	.28	6 × 8 or 12 ft.	2.4
3	10	.148	.50	5.25 × 8 or 12 ft.	2.6
[illegible]	10	.178	.60	6 × 8 or 12 ft.	2.8
[illegible]	10	.267	.90	4 × 8 or 12 ft.	3.8
[illegible]	10	.356	1.20	6 × 8 or 12 ft.	5.
[illegible]	6	.400	1.38	3.5 × 8 or 12 ft.	6.2
[illegible]	6	.600	2.07	4.66 × 8 or 12 ft.	8.3
[illegible]	16	.093	.42	4.5 × 8 or 9 ft.	2.8
[illegible]	4	.245	.84	5 × 8 or 12 ft.	3.7
[illegible]	4	.368	1.26	5 × 8 or 12 ft.	5.

INTERLOCKING PLATES.—For interlocking steel plates, of 24 gage black steel f. o. b. mill central Ohio, the following prices are named:

Length.	Per 100 sq. ft. Weight.	Price Flat Sheets.
Under 4 ft.	100 lbs.	$11.00
4 to 6 ft.	160 lbs.	10.00
6 to 8 ft.	160 lbs.	9.50
8 to 10 ft.	160 lbs.	9.00
10 ft.	160 lbs.	8.50

Curved sheets are held at an advance of $1 per 100 sq. ft. over flat.

For a desirable order prices might be shaded about 10%.

EXPANDED LATH.—There is a very good demand but the stocks are ample to supply the present needs. The price for carload lots given below is f. o. b. mill central Ohio:

Carload Lots. Price in cts. per sq. yd.

Gage.	Weight per sq yds.	Black.	Painted.	Galvanized.
27	2¼ lbs.	11½	12	18½
26	2½ lbs.	12½	13	19½
25	3 lbs.	13½	14	20½
24	3.4 lbs.	14	14½	21

Small Lots from New York, Store.

Prices in cents per sq. yd.

Gage.	Black.	Painted.	Galvanized.
27	13½	14	20½
26	14½	15	21½
25	15½	16	22½
24	16	16½	23

This lath is packed 9 sheets to the bundle.

DIAMOND LATH FROM STORE.

Designation.	Gage.	Weight per sq. yd.	Price Per sq. yd. Black. cts.
A	24	4 lbs.	20
A Special	24	4 lbs.	18
B	27	2.9 lbs.	16½
B Special	27	2.9 lbs.	15
B B	27	2.33 lbs.	14
Square Twist	24	4 lbs.	20
Diamond No. 24	..	3.75 lbs.	20
" No. 24 Special	..	3 lbs.	16½
" No. 26	..	2.66 lbs.	16½
" No. 26 Special	..	2.1 lbs.	14
Square Twist No. 27	..	2.75 lbs.	14½

CLAY PRODUCTS.

SEWER PIPE.—Business shows a marked improvement compared with last month. The larger sizes of pipe are now in much better demand, and there is likewise an active inquiry for the smaller size. The inquiry is more urgent, perhaps, in the West than in the East, for there numerous projects are under way calling for sewer extensions, while in the East there is not a great amount of strictly new work.

Discounts continue unchanged from those reported previously, except for the smaller sizes. Those applying to the "Eastern List" are as follows: 80% for sizes up to 24-in.; 78% for 27 and 30-in.; 73% for 33 and 36-in. At these discounts the net price per ft. for carload lots f. o. b. factory, are as follows:

Size	Price	Size	Price
2 & 3-in.	$0.028	18-in.	$0.267
4-in.	.035	20-in.	.315
5-in.	.042	21-in.	.378
6-in.	.056	22-in.	.42
8-in.	.077	24-in.	.455
9-in.	.091	27-in.	.99
10-in.	.112	30-in.	1.20
12-in.	.14	33-in.	1.70
15-in.	.19	36-in.	1.89

HOLLOW WALL TILE.—Business has developed during the last month, and now there is difficulty in supplying the material with the promptness desired by contractors. Considerable of this material is going into work which is a new departure, and this is one reason why the demand is so surprisingly good. Quotations continue unchanged from last month, and for hollow wall building tile, f. o. b. factory, Perth Amboy, N. J., prices are as follows:

Size.	Price per block, in cts.
4 × 12 × 12-in.	5.25
6 × 12 × 12-in.	6.6
8 × 12 × 12-in.	8.9
10 × 12 × 12-in.	10.5
12 × 12 × 12-in.	12.1

Fireproofing partition blocks are unchanged as follows:

Size.	Price per block, in cts.
2 × 12 × 12-in.	4.4
3 × 12 × 12-in.	4.4
4 × 12 × 12-in.	5.
6 × 12 × 12-in.	6.6
8 × 12 × 12-in.	8.8

These prices are for what would be considered small orders—approximately carload lots. For quantities which exceed $1,000 worth of material, concessions will be made.

ROOFING TILE.—The inquiry is larger than last month, and roofing tile can be said to be moving in good volume. Prices are steady, and, although firm, continue without change. The best grade of promenade roofing tile in flat blocks for high grade roofs is sold at $20 per M. for run of kiln and $30 per M. for selected. A cheaper form of tile with a smooth face can be had at $10 to $12, but it is not suitable for roof gardens. These prices are for 9 × 9 blocks f. o. b. factory. It requires 258 blocks to lay 100 sq. ft. of roof surface and, in consequence, the price per 100 sq. ft. of roof surface would be $4 to $5 for the smooth blocks; $7.82 for the run of kiln, and $10.73 for the selected.

Vitrified tile unglazed, of the French or Spanish type, is sold at approximately $8.50 per 100 sq. ft. of roof surface f. o. b. factory. Glass tiles are sold at 60 cts. each. It requires 183 of these for 100 sq. ft. of roofing.

DUCT TELEPHONE.—Business is very active. The larger users are taking liberal quantities of the material, and are pushing extensions of their lines. Prices are unchanged, small lots being sold at 4½ to 5 cts. per duct ft. for delivery in New York City, but on desirable orders this figure would be considerably shaded.

FLUE LININGS.—Business is fair, and prices continue without change. The discount from list f. o. b mill is 85%, delivered in New York; in small lots, they can be had at 78%. Based on a discount of 85% at the mill net prices are as follows:

	Weight in lbs.	Price per ft.
4½ × 8½-in.	14	$0.04½
4½ × 13-in.	20	.068
4½ × 18-in.	40	.15
6 × 12-in.	22	.075
7 × 7-in.	15	.053
8½ × 8½-in.	18	.068
8½ × 13-in.	28	.098
8½ × 18-in.	45	.135
12 × 16-in.	45	.15
13 × 13-in.	38	.128
13 × 18-in.	57	.18
14 × 16-in.	60	.165
16 × 16-in.	65	.24
16 × 20-in.	80	.30
18 × 18-in.	75	.30

LUMBER.

The volume of business is somewhat larger than a month ago, but it is far below the hopes and expectations of sellers. Prices are far from firm and in more than one line distinct weakness is observed. There seems to be more lumber than there is demand. Close buyers have been able to secure marked concessions from the prices recently prevailing. In the hardwood line the situation is different. There prices are higher, due to a good demand. A peculiar thing is noted in this line—while the price of first quality hardwood is higher the second grades and culls are lower with a limited demand.

Boston reports are not at all optimistic, and at Buffalo the activity is less than a year ago. In Savannah an improvement is reported. This seems to be general in the South.

Reports from 218 lumber mills in the Southwest state that in March, 1910, shipments were 25% greater than in 1909. The increase in cut was only 8%.

In 1909 the excess cut over shipments was nearly 35,000,000 ft., or 10¾%, while in 1910 the excess shipments over cut was 18,000,000 ft., after absorbing an increase in cut over 1909 of almost 29,000,000 ft.

The comparison of stock on hand shows a decrease of 1¾% for the month, bringing the stocks back to practically the same amount as on hand Jan. 1, 1910.

The lumber trade all over the country is much concerned over the prospect of higher freight rates. To some it would be a benefit, but at the expense of their competitors situated further from water transportation.

NORTH CAROLINA PINE.—The market for lumber of this kind is good and prices are steady. This may be on account of the curtailment at the mills some months ago. There is no doubt that the cut could be increased if prices warranted it.

For pieces 20 ft. long and less, in car lots New York, prices per thousand are as follows:

Size.		Size.	
2 × 4-in.	$18	2 × 10-in.	$21
2 × 6-in.	18	2 × 12-in.	22
2 × 8-in.	18		

Roofing boards, either ship lapped or tongue and grooved, are without change from last month, as follows:

Size.		Size	
13/16 × 5½ in.	$17.50	13/16 × 9½ in.	$19.00
13/16 × 7½ in.	18.00	13/16 × 11½ in.	20.00

Random width, between any two, take the price of the widest.

A slight advance is noted in Boston prices, 6-in. roofing board being quoted 50 cts. higher at $18 to $18.50; 8-in. at $19 to $20, and 10-in. at $19.50 to $20.50.

LONG LEAF YELLOW PINE. — While there is no shortage the demand is good, better than it has been for months and full prices are obtained. For delivery from yard, New York and vicinity, classed "Merchantable" under the 1905 rules of the Association, prices are as follows:

Price per Thousand in Yard, New York.

Size.	Length— 20 ft. base.	21 to 25 ft.	26 to 30 ft.	31 to 35 ft.
8 in. wide and under by 8 in. thick and under	$31	$32	$33	$34
10 in. wide by 10 in. thick and under	33	34	35	36
12 in. wide by 12 in. thick and under	36	37	38	39
14 in. wide by 14 in. thick and under	43	44	46	46
16 in. wide by 16 in. thick and under	45	46	47	48

For pieces longer than 35 ft. and less than 40 ft. add from $4 to $8 to base price.

SPRUCE.—The market is less firm than a month ago and about $1 lower. Canadian and Adirondack Spruce is $24 to $25 for 2 × 4-in. to 2 × 8-in.; $26.50 to $27 is asked for 2 × 9-in. and 2 × 10-in. These prices are only for material in lengths of 12 and 14 ft.

West Virginia spruce is in good demand at unchanged prices. For large lots, on track or delivered in the harbor New York, prices are as follows:

Size.	*Length, 10 to 20 ft.
2 to 4-in. thick by 4 to 8-in. wide	$27.00 to $28.00
2 to 4-in. thick by 10 to 12-in. wide	28.00 to 29.00
Sizes.	Length, 12 to 16 ft.
1 × 6 to 1 × 10	$28.00

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*For each additional ft. in length, over 20 ft., add $1 per M.

Prices have declined in Boston, building orders being quoted at $23.50. For 2 × 4-in. $20.50 to $21.00 is quoted; 2 × 3-in. to 2 × 7-in., $20.00, and 2 × 8-in., $21.50, although sales have been reported at $22.00.

SPRUCE BOARDS.—Prices are without change, but a bid for a large lot might induce sellers to accept lower figures. For Adirondack spruce delivered in car lots, New York, prices are as follows: 1 × 4-in., $24.50; 1 × 5-in., $25; 1 × 6-in. and 1 × 7-in., $25.50; 1 × 8-in., $26; 1 × 9-in., $28.50; 1 × 10-in., $28. Culls, or No. 3, can be had at $20 to $20.50.

Boston prices for "Merchantable" boards 5-in. and wider are $19.50 to $20 for short lengths and $21.50 to $22 for 12 ft.

FLOORING.—All flooring is sold at its actual width, but as laid, on account of the tongue and groove, it does not measure the full width. The following prices are for yard delivery of long-leaf yellow pine, the actual measurement being 13/16 × 2¼-in., but counted as 1 × 3-in.: A, sap, $43 to $45; A, flat, $31.50 to $32.50; common, $25.50 to $26.

FACTORY FLOORING.—Prices of tongue and grooved factory flooring of North Carolina pine from 2 to 4 ins. thick and 5 to 9 ins. wide are about $1 lower at $18 per M. f. o. b. Norfolk, Va. On cars New York City it can be had for $21 to $22.

MAPLE FLOORING. — Prices are unchanged. Clear stock with 2-in. face is $48; No. 1 is $39.50 for 2-in.; $41.50 for 2¼-in., and $38 for 3¼-in. Factory flooring of maple ranges from $27 to $34.

OAK FLOORING.—The finest grades of red or white oak, quarter sawed flooring are $90 to $100 per M. in yard New York. Selected, quarter sawed is $48 to $52, and very common oak is $30.

SHINGLES.—Prices are easier. The following figures are quoted per M. for cypress shingles, New York City: No. 1 Hearts, 6 × 18-in., $7.50; Primes, 6 × 18-in., $6.50; No. 1 Hearts, 6 × 20-in., $10; Primes, 6 × 20-in., $8. Pine shingles, 2X clear, 6 × 18-in., are $4 and 4X best are $5.25. White cedar can be had at $5 for 16-in. Maine shingles are $3.30 to $3.60 at mill.

HEMLOCK.—The demand for this kind of lumber is limited. It is being used more and more near the cutting woods and so does not find its way to the larger markets. The base price of Pennsylvania is $21, and of West Virginia is $20.50. The quotation of a month ago are repeated as follows:

Prices Per Thousand f. o. b cars New York.

Size.	Length— 10 ft.	12 ft.	14 ft.	16 ft.
2 × 4-in.	$23.00	$21.00	$21.00	$23.00
2 × 6-in. to 2 × 10-in.	21.00	21.00	21.00	18 to 20
3 × 4-in. to 12 × 12-in.	21.50	21.50	22.00	19 to 21
1 × 8-in.	....	18.00	18.00	18.00
1 × 10-in. & 1 × 12-in.	....	18.50	18.50	18.50

PILES.—There is a good inquiry for piles. For delivery in New York prices are without change as follows: 60 to 64 ft., $7; 65 to 69 ft., $8; 70 to 74 ft., $9.50; 75 to 79 ft., $11; 80 ft. and longer, $14.

In Norfolk the following prices are named for carload lots of yellow pine piles, in cts. per lin ft.; 40 to 50 ft. long, 12-in. butt, 7 cts.; 14-in. butt, 9 cts.; 50 to 60 ft. long, 12-in. butt, 8 cts.; 14-in. butt, 9 cts.; 60 to 70 ft. long, 14-in. butt, 10 cts.

Creosoted piles with 8-in. butt are 16 cts. per lin. ft., 14-in. butt, 26 cts., and 18-in. butt, 34 cts.

Oak piles with 14-in. butt, 40 ft. long, are $7.50 to $8; 50-ft. long, $11 to $11.50, and 60 ft. long are $14.50 to $15.

CROSS TIES.—The railways are not buying ties in the quantities expected and there is a large quantity unsold. The Lehigh Valley last month purchased 400,000 treated ties. Prices f. o. b. New York are as follows:

	Cts. each.
7 × 9-in.—8 ft. 6 ins.	83 to 84
7 × 8-in.—8 ft. 6-in.	78 to 79
7 × 9-in.—8 ft.	81 to 82
6 × 9-in.—8 ft.	77 to 78
6 × 8-in.—8 ft.	71 to 72

POLES.—See Line Construction.

LATH.—The market has a liberal supply of all kinds of lath, and prices are easier. Eastern spruce slab lath in New York are $3.25 to $3.75. In Boston, 1⅝-in. are $3.75 to $4, and 1½-in., $3.50 to $3.60.

SIDING.—Heart faced yellow pine siding is $32 to $34. Kiln dried sap siding can be had at $28 to $30.

GUM.—The outside prices of first quality is $1 higher. For carload lots, loaded on cars f. o. b. Ohio River points quotations are as follows: Red Gum is $33 to $35 for first quality boards and $21 to $23 for common ones.

Sap gum, firsts and seconds, is $21 to $23 for boards less than 12 ins. wide. Common sap gum is $16 to $18.

HICKORY.—The demand continues good and prices are unchanged and steady. For prime pieces, 1 to 2 ins. thick, wider than 4 ins., $50 to $66; 2¼ to 4 ins. thick, wider than 4 ins., $72 to $80; No. 1 common, 1 to 2 ins. thick, wider than 3 ins., $30 to $40; 2½ to 4 ins. thick, wider than 3 ins., $45 to $55.

BLACK WALNUT.—Trade is fair. Prime stuff 1 to 2 ins. thick and over 6 ins. wide, is held at $95 to $115 per M.; No. 1 common, 1 to 2 ins. thick and over 4 ins. wide, commands $52 to $65.

MAHOGANY.—Prices of mahogany are unchanged. The best grade of Mexican is $150; second grade, $100 to $110. Cuban is sold at $175.

CHERRY.—The best grade of material, 1 to 2 ins. thick and wider than 6 ins., sells at $90 to $100; No. 1 common, 1 to 2 ins. thick and wider than 4 ins., is sold at $52 to $60.

BOX BOARDS.—White pine box boards are selling at $27.50 to $28.50 per thousand in carload lots. This includes the standard widths up to 10 in. A common variety of box board sells at $24.50 to $25.

WHITE PINE.—The finest grades of white pine, "Uppers," used as pattern stock, range from $100 to $110, from yard, for 1 to 2-in. thick. For carload lots of one grade concessions of about $5 a thousand would be made. Yard prices for 2 to 3-in. pieces are $105 to $115, and 4-in. pieces are held at $115 to $120 and higher. White pine classed "Selects" is from $5 to $10 per thousand cheaper.

MILL PRICES, FOR CARLOAD LOTS AT OHIO RIVER POINTS.

YELLOW POPLAR, ROUGH.

Thickness.	Classification and Width: Prime, 8-in. and over.	Common, 4-in. and over.
1-in.	$54 to $58	$35 to $36
1½—2-in.	55 to 58	55 to 38
3-in.	60 to 64	....
4-in.	62 to 67	....

Poplar squares, 3 × 3-in., 4 × 4-in., 5 × 5-in., 6 × 6-in., and 7 × 7-in., of good quality, are $62 to $67; 8 × 8-in. and larger, where obtainable, are $72 to $77 per M.

CHESTNUT.

Thickness.	Classification and Width: A 1 6-in. and wider.	Sound. Wormy, 3-in. and wider.
1-in.	$48 to $52	$17.50 to $19
1½-in.	45 to 47	19.50 to 21
2-in.	46 to 48	20.50 to 22

WHITE ASH.

Thickness.	Classification and Width: A 1, 5-in. and over.	Common 3-in. and over.
1-in.	$48 to $49	$30 to $33
1½—2-in.	53 to 56	31 to 33
2½—3-in.	65 to 70	40 to 45
4-in.	70 to 75	40 to 45

Cull boards are $20 to $22 and planks $23 to $25.

WHITE OAK.

Thickness.	Classification and Width: A 1, 6-in and over.	Common 3-in. and over.
1-in.	$47 to $50	$30 to $32
1½—2-in.	52 to 53	34 to 35

Cull boards are $20; plank, from $21 to $22.

Quartered oak is from 50 to 66⅔% advance over plain.

FREIGHT RATES.—In the following list the carload freight rates on lumber, per 100 lbs., from Ohio River points to the principal cities are as follows: Baltimore, 16 cts.; Boston, 21 cts.; Buffalo, 10 cts.; Cleveland, 10 cts.; Detroit, 10 cts.; Indianapolis, 7 cts.; New York City, 19 cts.; Philadelphia, 17 cts.; Pittsburg, 10 cts.; Syracuse, 14 cts.; Toledo, 9 cts. From Norfolk, Va., to New York, 13 cts.; Boston, 15 cts. From Detroit, Mich., to New York, 19½ cts.; to Philadelphia, 17½ cts.

While there is every prospect that railway freight rates will be advanced, the new tariff will not be in effect for 30 days. This will, of course, only affect rail transportation and a great deal of lumber is transported, part of the way, by water.

MILL SUPPLIES.

SHAFTING.—The demand shows a marked improvement and there is quite a scarcity of material. The shortage is pronounced in the sizes bought by makers of automobiles. It is believed that this demand will continue for the remainder of the year at least. Prices for carload lots are higher at 52½% to 55% discount from list. Small lots are held at 50% discount. The following net prices per foot are based on the 50% discount: ¾-in., 4.15 cts.; 1-in., 7.30 cts.; 1¼-in., 11.50 cts.; 1½-in., 15 cts.; 1¾-in., 20.50 cts.; 2-in., 25.50 cts.; 2¼-in., 38.75 cts.; 2½-in., 41.75 cts.; 2¾-in., 50 cts.; 3-in., 60 cts.; 3½-in., 90 cts.; 4-in., $1.27½; 4½-in., $1.78; 5-in., $2.35; 5½-in., $3; 6-in., $3.85.

CHAIN BELTING.—Prices are unchanged, as follows: From 3 HP. to 10 HP., 30-in. centers complete, with two sprockets, $7 to $8 per HP.; from 10 HP. to 25 HP., 36-in. centers complete, $5 to $6 per HP.; from 25 HP. to 100 HP., 60-in. centers complete, $4 to $5 per HP.; from 100 HP. to 500 HP., 72-in. centers complete, $3 to $4 per HP.

PACKING.—Valve and stuffing box packing is unchanged at the following prices per pound: Asbestos wick and rope, 13 cts.; sheet rubber, 11 to 13 cts.; pure gum rubber, 40 to 45 cts.; red sheet, 40 to 50 cts.; Jenkin's "96" packing, 60 cts. Cotton packing can be had at 16 to 25 cts.; jute at 3¼ to 3½ cts., and Russian at 9 to 10 cts.

GRAPHITE LUBRICANTS. — The prices per pound, in barrel lots, to the small consumers, are given as follows: Engine flake graphite, 12 cts.; oiled graphite, 20 cts.; car box grease, 8 cts.; gear grease, for electric cars, 4¼ cts.; cup grease, 15 cts.; axle grease, 8½ cts.; automobile graphite grease, 16 cts.

Large consumers and jobbers can obtain considerable concession from these figures.

HIGH SPEED STEEL.—The demand shows an improvement. The general price for high carbon steels is 65 cts. per lb. Some of the largest users, however, refuse to pay more than 50 cts. for any grade.

LUBRICATING OILS.—While there is an improvement, the demand is not up to expectations. The following prices prevail to large consumers of approved credit who buy in 5-bbl. lots or larger:

	Cts. per gal.
*Cylinder, light filtered	23 to 32
*Cylinder, dark	20 to 27
*Cylinder, steam refined	14 to 22
Neutral Oils, filtered:	
Stainless white, 32 to 34 gravity	28 to 29
Lemons, 33 to 34 gravity	17 to 19
Dark, 32 gravity	15 to 18
Crank Case oil	15 to 17

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*Prices vary according to test.

FIRE HOSE.—The higher price of rubber is having an influence on the price of hose, but no radical changes have been announced. The standard grade of underwriter's cotton rubber-lined hose, ⅝ in. in diameter, warranted 350 lbs. pressure, is sold in 50-ft. lengths, complete with couplings, at 65 cts. per ft. Common hose, 2½ ins. in diameter, tested to 200 lbs. pressure, is 35 cts. per ft.

BELTING.—The demand is better than usual, and in some quarters difficulty is experienced in securing supplies as needed. In the leather belting line, the same complaint is heard as last month, that is, tanners say the difference between the cost of hides and the finished leather is too small to permit of a reasonable profit. Hides also are rather scarce, and with the good demand for belting it would not be surprising if somewhat higher figures should rule. For the present, however, quotations for leather belting are unchanged from last month at the following discounts: Extra heavy, 55%; heavy, 60%; medium, 60 and 10%; light, 60, 10 and 10%; shoulder, 75%; standard, 70 and 10%.

The price of rubber belting has advanced, and the list has been changed. In the accompanying table is given the revised list price of rubber belting which went into effect last month. The advance in rubber belting is material, on some sizes being as high as 20%.

The following tables give the net price of the best grade of rubber belting, the discount being 50 and 10%: Competition grades can be had at 75% discount, and standard at 70%. As stated, leather belting is unchanged. Net prices will be found on page 170 in the issue of May 5th.

RUBBER BELTING.

Revised List.

Inch.	2-ply	3-ply	4-ply	5-ply	6-ply	7-ply	8-ply
1	$0.09	$0.11	$0.13	....	....	....	....
1¼	.11	.13	.16	....	....	....	....
1½	.13	.15	.19	$0.23	....	....	....
1¾	.15	.17	.22	.27	....	....	....
2	.18	.20	.25	.31	$0.37	....	....
2½	.22	.25	.31	.38	.46	....	....
3	.26	.30	.37	.45	.55	....	....
3½	.30	.35	.43	.53	.65	....	....
4	.34	.40	.50	.61	.75	$0.86	....
4½	.38	.45	.55	.69	.84	.96	....
5	.42	.50	.61	.76	.91	1.06	....
6	.50	.60	.72	.89	1.08	1.25	$1.44
7	.59	.70	.84	1.04	1.25	1.46	1.68
8	.67	.80	.96	1.19	1.44	1.68	1.92
9	.76	.90	1.07	1.34	1.60	1.88	2.16
10	.84	1.00	1.20	1.49	1.77	2.09	2.40
11	.92	1.10	1.32	1.63	1.96	2.29	2.62
12	1.00	1.20	1.43	1.78	2.15	2.50	2.85
13	1.10	1.30	1.56	1.95	2.34	2.73	3.12
14	1.19	1.40	1.69	2.11	2.54	2.96	3.39
15	1.28	1.52	1.83	2.28	2.74	3.19	3.65
16	1.37	1.65	1.96	2.44	2.94	3.42	3.92
18	1.55	1.87	2.22	2.77	3.33	3.88	4.44
20	1.74	2.09	2.49	3.10	3.73	4.35	4.97
22	1.94	2.33	2.77	3.47	4.16	4.85	5.54
24	2.16	2.60	3.08	3.85	4.62	5.39	6.16
26	2.38	2.86	3.39	4.23	5.08	5.93	6.78
28	2.60	3.12	3.70	4.62	5.54	6.47	7.39
30	2.82	3.39	4.00	5.00	6.00	7.00	8.00
32	3.04	3.65	4.31	5.39	6.47	7.55	8.62
34	3.26	3.92	4.62	5.78	6.93	8.09	9.24
36	3.48	4.18	4.93	6.16	7.39	8.62	9.86
38	3.70	4.44	5.24	6.55	7.85	9.16	10.47
40	3.92	4.71	5.55	6.93	8.32	9.70	11.09
42	4.14	4.97	5.85	7.32	8.78	10.24	11.70
44	4.36	5.24	6.16	7.70	9.24	10.78	12.32
46	4.58	5.50	6.47	8.08	9.70	11.32	12.94
48	4.80	5.76	6.73	8.47	10.16	11.86	13.55
50	5.02	6.03	7.08	8.85	10.63	12.40	14.17
52	5.22	6.29	7.39	9.24	11.09	12.94	14.78
54	5.46	6.56	7.70	9.63	11.55	13.48	15.40
56	5.68	6.82	8.01	10.01	12.01	14.01	16.02
58	5.90	7.08	8.32	10.40	12.47	14.55	16.63
60	6.12	7.35	8.62	10.78	12.94	15.09	17.25

Rubber Belting, Net Price Per Ft.

Width, Ins.	2-ply.	4-ply.	6-ply.	8-ply.
3	$0.12	$0.17	$0.25	....
4	.16	.23	.33	....
5	.19	.28	.41	....
6	.23	.33	.49	$0.65
7	.27	.38	.57	.76
8	.31	.44	.65	.87
9	.35	.48	.72	.98
10	.37	.55	.80	1.08
12	.45	.65	.97	1.29
14	.54	.76	1.15	1.52
16	.62	.88	1.32	1.76
18	.70	1.00	1.50	2.00
20	.79	1.13	1.69	2.24
22	.88	1.26	1.88	2.50
24	.98	1.39	2.08	2.76
26	1.08	1.53	2.28	3.05
28	1.17	1.67	2.50	3.33
30	1.27	1.80	2.70	3.60
34	1.47	2.10	3.12	4.17
38	1.67	2.38	3.55	4.75
42	1.87	2.63	3.95	5.35
46	2.07	2.90	4.35	5.78
50	2.27	3.18	4.80	6.47
56	2.57	3.61	5.42	7.25
60	2.77	3.90	5.80	7.75

COTTON WASTE.—Prices continue unusually high, and it is practically impossible to get material at any lower figure than 9 to 10 cts. per lb. The scarcity has been so marked that waste has been purchased, shipped abroad, and re-picked for the long fibers.

PAVING MATERIALS.

ROAD OIL.—Never has the demand for road oil been as large as this season, not only in the Northern States where the good roads propaganda has been in evidence for several years, but in the South there are a number of good roads being projected using asphaltum or tar for binder. In city and village, roads treated with oil is much more prevalent than last year. Prices are unchanged, 30% asphaltum oil being quoted at 4 cts. per gal. Texico macadam asphalt 90 to 95%, is 11 cts. per gal. f. o. b. New York or Philadelphia; A or X Tarvia in bbls. is 8½ to 9½ cts. per gal.; B grade in bbls. is 7 to 8 cts. per gal. A contract for furnishing 50,000 gals. of tar road oil in New York was taken at 6.2 cts. per gal. and a like amount of asphalt road oil was sold at 4.3 cts.

GRANITE BLOCK.—Sellers of granite block have never been as busy as they are this season. The demand is surprisingly good, and although contracts have been made and signed for delivery it is difficult to get shipments as desired. For this reason new business is rather quiet. Prices continue unchanged as follows: Cape Ann granite blocks delivered in New York City, in the old style block, is $1.60 to $1.75 per sq. yd. Dressed block to lay with ¼ in. joint is $2 to $2.10 per sq. yd.

ASPHALTUM.—The market is more or less nominal and the inquiry is small. Prices are without change, Trinidad being quoted at $25 per net ton. California asphaltum is $26 to $30 per net ton f. o. b. New York, and $16 to $19 at point of shipment.

PAVING BLOCKS, WOOD.—The activity which was apparent in the paving block industry has subsided. Prices continue without change as follows: For long leaf yellow pine blocks having not less than 20 lbs. oil per cu. ft., $1.85 is quoted for 3-in. block; $2.05 for 3½-in. block and $2.25 for 4-in. block. All these prices are per sq. yd. f. o. b. New York.

VITRIFIED BRICK.—The demand in the East is limited. Prices are without change at 55 to 70 cts. per sq. yd. at point of shipment.

GLASS.

SKYLIGHT GLASS.—Inquiries are large, but consumers are being supplied with glass promptly. Prices continue without change and are as follows for small lots from store:

Thickness, ins.	Price per sq. ft.
1/8	7 cts.
3/16	10 cts.
1/4	15 cts.

Wired skylight glass, ¼-in. thick, is 25 cts. per sq. ft.

VAULT LIGHTS.—Business continues very fair, and prices are well maintained. To contractors furnishing their own molds, glass is sold at 4 to 5 cts. per lb. Bulls eyes 3 ins. in diameter are 3 cts. and square lights 3½ × 3½-in., are 5 to 6 cts.

WINDOW GLASS.—A number of factories have closed down and the usual mid-summer drawing of fires will occur during the present month. Stocks are sufficient for the summer requirements and, in fact, are a little unwieldy. Larger consumers are unwilling to buy at present figures, believing that an extra 5% may be obtained later in the year. The general price, however, is 90% discount for all sizes of single and double strength. This applies to the jobbers' list of October 1, 1903.

The net prices per box of 50 sq. ft., at the discount named, are as follows:

American Window Glass.

Size of Glass, Ins.	Single Thickness. Price per box, 50 sq. ft. A.	B.
6 x 8 to 10 × 15	$2.40	$2.20
11 × 14 12 × 13 to 14 × 20	2.52	2.40
10 × 26 to 16 × 24	2.70	2.52
18 × 22 20 × 20 to 20 × 30	2.87	2.64
15 × 36 to 24 × 30	2.96	2.70
26 × 28 to 24 × 36	3.14	2.79
26 × 34 28 × 32 to 30 × 40 30 × 30	3.47	2.94
32 × 38 34 × 36 to 30 × 50	4.00	3.46
30 × 52 to 30 × 54	4.27	3.76

PLATE GLASS.—The demand is not as good as a month ago. The larger orders have been filled and manufacturers do not anticipate any great increase unless there should be a decided turn for the better in the building trades. Discounts continue unchanged, at 90% from list. The following price list gives the net price of polished plate glass, boxing being charged extra.

NET PRICES OF POLISHED PLATE GLASS IN DOLLARS.

Length. Feet.	Width, Feet: 1.	1.5	2	2.5	3	3.5	4	4.5	5	6	7	8	9	10
1	0.27	0.42	0.55	0.73	0.95	1.14	1.30	1.51	1.68	2.64	3.15	3.60	4.14	4.60
1.5	....	0.66	0.95	1.20	1.58	2.31	2.64	3.04	3.38	4.14	4.83	5.52	6.28	7.05
2	....	....	1.30	1.75	2.64	3.15	3.60	4.14	4.60	5.52	6.51	7.52	8.64	9.80
2.5	....	....	....	2.82	3.38	4.03	4.60	5.18	5.82	7.05	8.40	9.80	11.10	12.30
3	....	....	....	....	4.14	4.83	5.52	6.28	7.05	8.64	10.30	11.80	13.50	15.00
3.5	....	....	....	....	....	5.70	6.51	7.41	8.40	10.30	12.10	14.00	15.80	17.50
4	....	....	....	....	....	....	7.52	6.64	9.80	11.80	14.00	16.00	18.00	20.00
4.5	....	....	....	....	....	....	....	9.93	11.10	13.50	15.80	18.00	20.30	22.50
5	....	....	....	....	....	....	....	....	12.30	15.00	17.50	20.00	22.50	25.00
6	....	....	....	....	....	....	....	....	....	18.00	21.00	24.00	27.60	30.60
7	....	....	....	....	....	....	....	....	....	....	24.50	28.60	32.20	35.70
8	....	....	....	....	....	....	....	....	....	....	....	32.70	36.80	42.00
9	....	....	....	....	....	....	....	....	....	....	....	....	41.80	46.40
10	....	....	....	....	....	....	....	....	....	....	....	....	....	52.50
11	5.06	7.92	10.80	13.80	16.50	19.30	22.00	24.80	28.10	33.70	39.70	45.40	52.00	71.50
12	5.52	8.64	11.80	15.00	18.00	21.00	24.00	27.60	30.60	36.80	43.30	50.40	70.20	78.00
13	6.05	9.56	13.00	16.30	19.50	22.80	26.60	29.90	33.20	40.20	47.80	67.60	76.10	123.50
14	6.51	10.30	14.00	17.50	21.00	24.50	28.60	32.20	35.70	43.30	51.50	72.80	119.70	161.00
15	....	....	....	....	....	26.80	30.60	34.50	38.30	46.40	68.30	78.00	155.30	180.00
16	....	....	....	....	....	36.40	41.60	46.80	52.00	62.40	72.80	121.60	172.80	224.00
17	....	....	....	....	....	38.70	44.20	49.80	55.30	66.30	77.40	156.40	214.20	323.00
18	....	....	....	....	....	41.00	46.80	52.70	58.50	70.20	119.70	172.80	307.80	342.00

METALS.

COPPER.—The lowest prices reached during the month were in the early part of May. Sales of electrolytic were made as low as 12.37½ cts. This brought business from European consumers, and although buying was not large, it was sufficient to gradually advance quotations to 12.75 cts. Around this figure there was a deadlock for several weeks, and in fact, no large buying by American consumers has been made, although it is true that they have taken some 50,000,000 lbs. of metal. The present quotation is 12.7[illegible] cts. Several large dealers in the United States have agreed to take a round tonnage at the inside figure. The producers, however, are unwilling to sell a large lot at less than 13 cts.

Credit must be given for a better handling of the copper situation on the part of the producers than for several years. There seems to be a close working agreement among the largest producers, who are endeavoring to stimulate consumption. There is more copper actually being used now than any time since the panic and if this present policy lasts it will probably see the copper industry on a better basis—in a year or eighteen months—than in a long time. The statistics of the Copper Producers' Association, published about May 10, indicate that the stocks in the United States increased about 18,000 tons. The statistics for June will be more favorable, but it will be a long time before the surplus disappears.

As stated, electrolytic is 12.75 to 13 cts., Lake is 13.12½ cts., and castings 12.62½ to 12.75 cts. Exports during April were about 18,000 tons.

ROOFING COPPER.—Users of all kinds of roofing copper are freely buying. The mills have no difficulty in supplying the demand, still there is activity noted in all branches of the trade. Prices are unchanged at 18 cts. base.

LEAD.—The American Smelting & Refining Co. reduced its quotation to 4.40 cts., and although the independent producers were willing to accept business at concessions of 5 points most of the month, they have recently advanced their price for spot lead in New York to 4.42½ cts. The demand for lead for the manufacture of telephone cable is exceedingly active.

SHEET LEAD.—The manufacturers of chemicals have been in the market for some fair quantities of sheet lead. That is the only business worthy of note. Prices are unchanged at 6.25 and 6.75 cts., the inside being to large consumers, while the outside price is to those taking only a small quantity.

LEAD WOOL.—Prices continue without change at 8.25 cts. New York.

SPELTER.—The market has been unusually erratic for this metal. A decline from 5.50 cts. to 5 cts. was made within two days and although the price only remained at the low level for less than a week, there was considerable buying. Since then there has been an advance and spelter is now quoted at about 5.30 cts. New York and 5.15 cts. St. Louis. It is evident that there is more spelter being produced than is consumed, but the producers can find no way to restrict production. Brass Mill Special is in very good demand and is selling at 10 to 15 points in advance over Prime Western, which is quoted above.

PIG TIN.—Consumption is fairly large and the shipments from Europe are small. Moreover, the far East is not sending to Europe and the United States the expected amount of tin. Very little danger of a shortage exists at present, however, for the United States Steel Corporation has a large stock on hand, and indications are that this interest has been selling tin to consumers and shipping direct from its own warehouse. This is no new departure on the part of the corporation, and it is known that a large amount was purchaesd last year. The price of tin is slightly higher than last month, being quoted at 33.30 cts. The periodic Banca sale occurred in Amsterdam, Holland, the latter part of May and went at a figure equivalent to 33 cts. c. i. f. New York. This indicates that there is a premium, an unusual thing, of about 25 points for spot tin in New York.

MISCELLANEOUS METALS.—Small lots of metals and metal products can be obtained from jobbers' stores New York, at the following prices:

	Per lb.
Bismuth	$2.25
Brass tubes, iron pipe sizes:	
½-in.	.19
¾ to 3-in.	.18
3½-in.	.19
4-in.	.20
Brass, sheets	.14¾
Brass, rods	.14¾
Solder, ½ & ½ guaranteed	.22
Zinc sheets	.08½
Manganese bronze rods	.16
Manganese bronze in crucible form	.14
Monel metal, ingot	.16

OLD METALS.—Prices have declined. Miscellaneous lots of scrap metal amounting to about a ton can be sold to dealers in New York at about the following prices:

	Cts. per lb.
Copper, heavy and crucible	10.75 to 11.00
Copper, heavy and wire	10.50 to 10.75
Copper, light and bottoms	9.50 to 9.75
Brass, heavy	7.00 to 7.50
Brass, light	5.70 to 6.00
Heavy machine composition	9.75 to 10.00
Clean brass turnings	7.00 to 7.25
Composition turnings	8.00 to 8.25
Lead, heavy	... to 3.50
Lead, tea	... to 3.25
Zinc, scrap	... to 3.75

LINE CONSTRUCTION.

TELEGRAPH WIRE.—Some of the largest consumers have purchased more freely than last month. Prices are steady and without change. For lots of fair size, the wire measured, in Birmingham wire gage, the prices in cts. per lb. are as follows: "Extra Best Best," Nos. 6 to 9, 4⅜ cts.; Nos. 10 and 11, 4½ cts.; No. 12, 4⅝ cts.; No. 14, 5⅛ cts. "Best Best," Nos. 6 to 9, 3¼ cts.; Nos. 10 and 11, 3⅜ cts.; No. 12, 3½ cts.; No. 14, 4 cts. Actual freight is allowed from Trenton, N. J., where it does not exceed 25 cts. per 100 lb.

COPPER WIRE.—The demand is only fair. There is no doubt, however, that the wire mills are doing a great deal more business than last year. The base price, No. 8 wire, is 14.25 cts. and this could probably be shaded. Grooved trolley wire is held at an advance of 0.25 cts. per lb. over the base price. A more comprehensive statement of conditions in the copper market will be found in the review of that market under the heading "Metals."

ALUMINUM.—Trade is quiet. Prices are without change at 31 cts. base.

INSULATORS.—The demand is fair and prices are without change. Glass insulators in lots of more than 1,000 and less than 10,000 are sold at the following prices per 1,000: Double petticoat 20 oz., $33; Western Union, $30.25; No. 2 cable, $53.90; No. 4 cable, $210; Muncie type, 7-in., $236.50; No. 3 triple petticoat, 4½-in., $90.75.

POLES.—Prices continue without change. White cedar poles f. o. b. Rex, Mich., freight rate to Chicago 12 cts., are quoted by the Backus-Judd Lumber & Cooperage Co., Minneapolis, Minn., as follows:

Length in feet.	Price each		
	Diameter at top		
	5-in.	6-in.	7-in.
25	$0.60	$1.00	$1.50
30	....	1.55	3.50
35	....	3.75	5.00
40	....	5.25	7.00
45	....	7.25	9.50
50	....	10.00	11.00

Cedar poles shipped from the state of Washington are quoted by R. E. Dowie Pole Company, 432 New York Block, Seattle, Wash., as follows:

Length in feet.	Diameter at top	Price each.
30	8-in.	$2.40
35	8-in.	2.80
40	8-in.	3.20
45	9-in.	4.50
50	9-in.	5.00
55	9-in.	5.50
60	9-in.	6.00
65	9-in.	9.75
70	9-in.	10.50
75	9-in.	11.25
80	9-in.	12.00

Chestnut poles, f. o. b. Mechanicville, N. Y., are quoted by T. C. Luther of that place as follows:

Length in feet.	Price each		
	Diameter at top		
	5-in.	6-in.	7-in.
25	$1.50	$2.00	$2.75
30	2.50	2.75	3.25
35	2.75	3.25	4.00
40	3.25	4.00	5.50
45	4.00	5.50	7.50
50	5.50	7.50	9.50

FIR CROSS ARMS.—Prices are unchanged and are as follows:

	Price per arm in cts.		
Size, 3¼ × 4¼ in.	Pacific Coast.	Chicago.	New York.
3 ft., 2-pin	8	13½	15½
4 ft., 4-pin	11	18½	21
5 ft., 4-pin	16	26½	28½
6 ft. 4 and 6-pin	20½	31½	36
8 ft.; 6 and 8-pin	28	43	48½
10 ft., 8, 10 and 12-pin	37	55½	67½

OILS AND PAINTS.

PETROLEUM PRODUCTS.—Petroleum is lower. The demand, however, is fair. The Standard Oil Co. quotes prices of crude oil in bbls. at the wells as follows: Pennsylvania second sand and Tiona, $1.35; Mercer black, 90 cts.; Corning, 79 cts.; New Castle, 97 cts.; Indiana, 79 cts.; Illinois, 60 cts.; Illinois heavy, 52 cts. per bbl. below 30 gravity; Kansas heavy, 30 cts. per bbl. In the local market petroleum from tank wagon is 8½ cts. Auto-naptha and stove gasoline is 1 ct. higher than last month, at 14¾ cts.

Fuel oil is practically unchanged in price, and is selling, in tank cars, at 95 cts. to $1.05 per bbl. of 42 gals. at seaboard points.

LINSEED OIL.—A slight decline in price occurred during the middle of the month, but the shading in no case amounted to more than 2 or 3 cts. per gal. Prices have since advanced to the high level. It is expected that the price of oil will show a sharp decline later in the year, as for example, flaxseed is now quoted at $2.20, while it can be bought for October delivery at $1.63. The price of oil is practically unchanged from last month at 82 to 83 cts. per gal. for city raw; from 81 to 82 cts. for out-of-town raw, and 90 cts. for Calcutta oil.

SPIRITS TURPENTINE.—The demand is better than usual. This is the only thing that is keeping prices up at present. It is expected that when the new crop comes on the market there will be a material recession. At present spirits in 5-bbl. lots can be had at 62½ to 63 cts. per gal. in New York. In Savannah, Ga., prices are higher than last month at 59 to 60 cts., and in Charleston, S. C., are in advance of 1 ct. compared with last month at 60 cts. per gal.

PAINTS.—Some of those conversant with the paint trade affirm that the demand has never been greater than the present year. Apparently the high cost of oil has not yet deterred the painting operations in the least, although it is considered probable that some bridge painting may be deferred until prices are lower.

Prices of white lead in oil are unchanged. For lots of 500 lbs. or over, in 100, 250 and 500-lb. kegs, 7¼ cts. per lb. is quoted, in 25 and 50-lb. kegs, 7½ cts. per lb. Red lead and litharge in bbls., half bbls. and 100-lb. kegs is 7¼ cts. per lb.

Brown metallic is quoted at $16.50 to $22 per ton; red metallic, $14 to $18 per ton. American Venetian red in ton lots or larger is 75 cts. to $1.25 per 100 lbs., and English Venetian red, $1.15 to $1.60 per 100 lbs. Graphite bridge paints are in excellent demand at prices ranging from $1.10 to $1.25 for standard brands. It is rumored that prices might work higher later in the season. Hydrex preservative paint is 75 cts. per gal. in barrel lots, New York City.

CHEMICALS.

The following quotations are named for delivery in New York City for lots of fair size:

	Cts. per lb.
Nitric Acid, 30°	3.87½ to 4.25
Nitric Acid, 40°	4.50 to 4.87½
Sulphuric, 60°	0.90 to 1.00
Sulphuric, 66°	1.00 to 1.25
Sal Ammoniac, lump	9.25 to 9.75
Sal Ammoniac, granulated	5.87½ to 6.00
Sal Ammoniac gray	6.00 to 6.25
Sulphur, roll	1.85 to 2.15
Sulphur, flour	2.00 to 2.40
Sulphur, flowers	2.20 to 2.60
	Per gallon.
Alcohol, grain, U. S. proof	$2.61 to $2.63
Alcohol, denatured, 5-bbl. lots	.41 to .42
Alcohol, denatured, ½ bbls	.46 to .47
Alcohol, wood, 95 to 97	.50 to .53
Alcohol, wood, purified	.80

MISCELLANEOUS.

PAPER.—A good demand exists in all parts of the country and prices are firmer than a month ago, due to the continued advance in the cost of raw materials. Sellers' quotations are without change from last month as follows:

Tarred Paper:	Per roll of 108 sq ft.
Standard 2-ply, 40 lbs	$0.45
Extra heavy, 2-ply, 45 lbs	.55
Standard 3-ply, 60 lbs	.65
Extra heavy, 3-ply, 70 lbs	.75
Rosin Sized Sheathing:	Per roll of 500 sq. ft.
Light, 35 lbs	0.38
Medium, 30 lbs	.45
Heavy, 40 lbs	.60

PITCH.—The demand is fair, the consumers making new contracts as well as specifying freely on old ones. The best grades of pitch are sold at $14 per net ton in carload lots. Small quantities are held at $16 per net ton.

ROOFING CEMENT.—The demand is good and prices are unchanged at $25 per ton for Texaco.

OAKUM.—A considerable diminution in the demand is noted compared with last month, but still there is a very fair inquiry. Prices are unchanged as follows: Best grade, 6½ cts.; U. S. Navy, 5¾ cts.; common and plumbers' oakum, 2¼ cts. per lb.

ROPE.—Following an advance last month, prices of rope are again higher. The advance during the last two months has been unusual, amounting to nearly 2 cts. per lb. in the best grades. The highest grade of pure Manila is 9½ cts.; second grade, 8½ to 9 cts.; competitive grades, 8 to 8½ cts. Pure Sisal is unchanged at 7¾ to 8cts. for the best grade, while less desirable grades are obtainable at 6½ to 7 cts. Jute rope in commercial sizes is 5½ to 6 cts. per lb.

ROOFING SLATE.—The demand for roofing slate seems to have fallen off in the last month. The larger sellers in New York report that business is considerably less active and stocks on hand are large. While no reduction has been made in the price, a shrewd buyer could possibly secure a somewhat better quotation than those named below. The following quotations are per "square" or one hundred sq. ft. of roof surface in carload lots f. o. b. quarry stations of the size in most general use:

	Per 100 sq. ft.
Vermont, sea green	$4.00 to $4.50
Pennsylvania, Bangor Ribbon	4.00 to 4.50
Maine, Brownsville No. 1	6.00 to 7.75
Maine, Brownsville, No. 2	5.60 to 6.00
Red	10.50 to 12.25
Unfading green	4.50 to 5.00
Genuine Bangor	5.00 to 6.50

WATERPROOFING.—The prices for carload lots, f. o. b. cars New York, are as follows: Hydrex waterproofing felt, $1.25 per 100 sq. ft.; Hydrex compound "A," 26 cts. per gal.; Hydrex compound "B," 18 cts. per gal.

Texaco waterproofing cement is $30 per ton, in car lots, f. o. b. cars New York or Philadelphia.

Asphaltum, for waterproofing, is sold at $25 to $27 per net ton.

VAULT LIGHTS.—See Glass.

EXPLOSIVES.—Dynamite of the kind usually used by contractors, is approximately 11 to 13 cts. per lb. f. o. b. factory in ton lots. Blasting powder, classified as "soda" grade, is sold at $1.20 to $1.40 per keg or 25 lbs. in lots of 10,000 lbs. The following prices prevail on Trojan in carload lots, minimum 24,000 lbs., f. o. b. Pacific Coast points: No. 1, 13½ cts.; No. 2, 10½ cts.; No. 3, 10 cts. They have a disruptive force equivalent to 60%, 40% and 30% of nitro-glycerine.

Exploders, per hundred, are sold at the following prices: 4 ft., $3.60; 6 ft., $4.10; 8 ft., $4.60; 10 ft., $5.10; 12 ft., $5.60; 16 ft.; $6.60; 20 ft., $7.50; 24 ft., $9.40; 30 ft., $12; 36 ft., $14.60

Caps in lots of 10,000 are $7 to $8 per thousand.

Blasting machines for 10 holes are $12; 25 holes, $20; 50 holes, $40; 100 holes, $60.

LIGHTERAGE LIMITS.—The free delivery or "Lighterage Limits" in New York City are as follows: In Manhattan, from a point opposite the Fort Lee ferry south along the Hudson River around the Battery and north along the East and Harlem Rivers to the Jeróme Ave. Bridge at 155th St. In New Jersey, south from Fort Lee ferry to Bayonne City; points on the north and east shore of Staten Island between Bridge Creek (Arlington) and Clifton, both inclusive, and including Elm Park, Eristina and Shooters Island. In Brooklyn, from 69th St., Bay Ridge, north to Pot Cove, Astoria, Long Island City.

ASBESTOS.—A good demand is noted and prices continue without change. Asbestos building felt and sheathing in less than ton lots is 3½ cts. per lb. for the light, weighing from 6 to 30 lbs. per 100 sq. ft.; 4 cts. per lb. is charged for the heavy, weighing from 45 to 56 lbs. per 100 sq. ft.

Millboard is made in standard sheets, 40 × 40 ins., and 42 × 44 ins. It varies in thickness from 1/32 to ½-in. and in weight from 2 to 27 lbs. per sheet. The net price in 100-lb. lots is 5 cts. per lb.

Transite, asbestos wood, used for fireproofing, ventilators and smoke jacks, comes in standard sheets, 36 × 48 ins., 42 × 48 ins., and 42 × 96 ins. The prices f. o. b. factory, Nassau, N. H., are as follows:

Thickness.	Weight.	Price.
⅛-inch	1 lb.	$0.08
3/16-inch	1½ lbs.	.12
¼-inch	2 lbs.	.16
5/16-inch	2½ lbs.	.20
⅜-inch	3 lbs.	.24
7/16-inch	3½ lbs.	.28
½-inch	4 lbs.	.32
9/16-inch	4½ lbs.	.36
⅝-inch	5 lbs.	.40
¾-inch	6 lbs.	.44
⅞-inch	7 lbs.	.48
1 inch	8 lbs.	.52
1¼ inches	10 lbs.	.56
1½ inches	12 lbs.	.64
1¾ inches	14 lbs.	.72
2 inches	16 lbs.	.80

RUBBER.—The continued high price of rubber is now being felt in all lines of industry. The manufacturers of rubber belting have revised their list and makers of other mechanical products are refusing to accept orders for future delivery. The manufacturers of automobile tires, as a unit, have declined to make quotations for next year's delivery. The production of rubber has not kept pace with the consumption, although it is doubled since 1906. Perhaps the greatest difficulty is the inability to stimulate production of the Para grades, which are from South America. It is true that there has been steady increase in the output year by year and the shipments for the season of 1909 and 1910 is estimated to be 40,000 tons, an increase of 2,000 tons compared with the previous year. The seeming difficulty is the lack of transportation facilities, for those conversant with conditions in South America affirm that there are thousands of square miles of rubber producing forest that have never been tapped. It is an economic problem, too, for the pay of the natives consists in bulky articles which are as difficult to transport from the sea coast inland as to bring to seaport the crude rubber. While railroad facilities are being developed in that region, they are slow, and the probabilities are that many years will elapse before this Amazon region will be supplying its full quota of rubber. In the meantime, plantations in the East are producing slowly, and although this production is steadily increasing, the difficulty is that the plantation now being set out will not produce rubber for a decade or more. The Guayule rubber that is produced in Mexico is quite a factor in tonnage, but it is difficult to use this rubber for higher pressure. In fact, this is not considered in the statistics, but it undoubtedly goes into uses where, if it were not obtainable, higher grades of rubber would be used. There is still more or less of a deadlock between consumers and producers, with prices of Up River Para nominally quoted at $2.35 to $2.51 per lb.

PINE TAR.—Prices are more or less nominal, $6 being quoted for kiln and $5.75 for retort. These prices are for bbls. of 480 lbs.

PITCH.—The market is quiet at $3.40 per bbl. of 200 lbs. gross.

INDUSTRIAL NOTES.

PAWLING & HARNISCHFEGER CO., Wilwaukee, Wis., designers and builders of Electric Cranes and Hoists, has appointed Mr. Albert B. Bowman, 720 North Second St., St. Louis, Mo., a special sales representative.

PIG IRON FROM CHINA was imported in Los Angeles harbor last month. The shipment was insignificant in tonnage, being only 1,100 tons, and presumably a low freight rate as ballast. It, however, is a direct importation from China coming from the Hankow Works of the Hanyang Iron & Steel Works. It is consigned to the Robert Dallett Co. of Los Angeles.

DEFINITE ANNOUNCEMENT has been made of the sale of $50,000,000 St. Paul bonds in Paris, $10,000,000 Big Four debentures, $10,000,000 Baltimore & Ohio notes, $17,000,000 Seaboard Air Line bonds, $15,000,000 New York Telephone bonds and $8,500,000 Lake Shore notes. This is the most important flotation of securities placed abroad since the Pennsylvania Railroad sold $50,000,000 of 15 year bonds with a French syndicate in 1906.

UNCONFIRMED REPORTS prevail that Mr. Chas. A. Moore, who is the president of one of the largest machinery firms on this continent, has obtained a concession from the Turkish Government to construct a railroad through the Euphrates Valley to the Black Sea. The country is a virgin one as far as railroad facilities are concerned; the only transportation facilities being camels. It is said that this railroad will serve a population of 12,000,000 people.

WOODLAWN is a new city being built by the Jones & Laughlin Steel Co. in the Pittsburg district. This city surrounds the new furnaces and steel mills of the company. The city has been built complete, work having been started late last year, and not only are houses for the workmen provided, but schools, a police and fire department. A feature of the new city will be a club and social center built for the workmen and containing bowling alleys and rooms for other kinds of recreation. These houses, erected by the company, will be sold only to workmen of the company.

THE C. O. BARTLETT & SNOW CO., engineers and manufacturers of elevating and conveying machinery, report that they have recently taken orders for drying machinery from the Verna Brick Co., Duluth, Minn., and the Central Mfg. Co., Lockland, Ohio. To the Jacobs Asbestos Mining Co., Tetford Mines, Canada, they have sold one conveyor capable of conveying 150 tons of asbestos rock per hour, and to the Diamond Rubber Co., Akron, Ohio, two chain conveyors, having 120-ft. centers for carrying tire cores. Garbage disposal machinery has been sold to the Washington Fertilizer Co., Washington, D. C., and the New York Sanitary Utilization Co., New York City.

RAILWAY DEVELOPMENT in North Dakota is being aggressively pushed by the Northern Pacific, The Great Northern, The St. Paul and other roads. The Northern Pacific, perhaps, has the most elaborate scheme of development. A line from Stanton goes in a northerly direction through Mandan to Ft. Yates, running along the Missouri River, is already graded and ready for track, a distance of about 134 miles. This intersects the present line at Mandan, which is across the river from Bismark. Another line running from Canon Ball on the Missouri to the westerly line of the state, and then to Miles City, Mont., a distance upwards of 200 miles, parallels the present Transcontinental route from 40 to 60 miles to the southward. This line has been surveyed. Another contemplated line is from Sanborn, a junction point in the eastern part of the state, to Sanger, 150 miles. A survey of this has been completed, but whether it will be constructed or not is a matter of question. A short cut of 27 miles has been surveyed from Oaks Junction to Gwinner, and another line laid out from Edgerley to a point on the Missouri River near Emmonsburg, 90 miles. The completion of these two last lines with a bridge across the Missouri would give the company a new and shorter route across the state, opening up a section of the country which now has no east and west facilities.

The Great Northern is likewise contemplating a new line across the state, and have let contracts for grading a line extending from Fargo northwesterly to Surry where it joins the present main line. The present right-of-way will be used for about 60 miles from Surry to Stanley, and a new line will be built from that point to the western part of the state, extending into Montana and joining the present main line there. This portion is now under construction.

The Minneapolis, St. Paul & Sault Ste Marie have surveys completed from Grand Forks to Washburn, by the way of Courtney, a distance of 200 miles. From that point, where the present main line is joined, it extends up to Plaza where a new line is surveyed to Williston, a distance of 105 miles. It joins the Great Northern at this point.

The Chicago, Milwaukee & St. Paul likewise contemplates an extension to its Harlem branch northward to Valley City; merely a feeder, and another feeder from McLaughlin in South Dakota to New England, N. D., 147 miles. The grading is being done on this branch.

An electric line is likewise projected from Hettinger Station, on the St. Paul, northeasterly to Kiem, near the Missouri River.

OPEN HEARTH STEEL PRODUCTION in 1909 broke all previous records according to statistics compiled by the American Iron & Steel Association. The total production of open hearth steel was 14,493,936 tons compared with a Bessemer production of 9,330,783 tons. Including crucible and other forms of steel, the total production of ingots and castings last year was 23,955,021 tons. In 1908 open hearth steel production for the first time in history was greater than that of Bessemer, but the production of both in that year was only 14,023,247 tons. In 1907, while the total production was nearly equal to that of last year, being 23,362,594 tons, the production of Bessemer was slightly larger than that of open hearth. In the interval Bessemer production has fallen 2,300,000 tons, while that of open hearth has increased about 2,800,000.

THE FIRST ISSUE of "Poor's Manual of Industrials," designed to perform a work similar to that accomplished by the "Manual of Railroads" for more than forty years, has recently been issued. The total capitalization of all industrial corporations represented in the book is $18,873,000,000, of which $17,529,000,000 is in the United States. The total capitalization of all the railroads in the United States is $17,234,000,000. The total stock issued by industrial corporations in the United States is shown to be $13,132,000,000; total bonds, $4,397,000,000. The railroads have issued $7,642,000,000 stock and $9,593,000,000 bonds. The average rate of interest on bonds of industrial corporations is 5.27%, as against 3.88% on railroad bonds. The average dividend rate on industrial stock is 4.02%, as against 3.50% on railroad stock. Gross earnings of industrial corporations making complete returns to the manual, and representing an aggregate capitalization of $7,163,000,000, were $2,165,000,000. The gross earnings of all the railroads, representing an aggregate capitalization of $17,234,000,000, were $2,407,000,000.

TRADE PUBLICATIONS.

LEATHER BELTING.—New York Leather Belting Co., 151 Beekman St., New York City. Paper; 9 × 12 ins.; pp. 14; illustrated.

The size of "Phoenix," the house organ of this company, has been increased to 9 × 12 ins.

ASBESTOS PACKING.—H. W. Johns-Manville Co., 813 Superior Ave., N. Y., Cleveland, Ohio. Paper; 6 × 9 ins.; pp. 4; illustrated.

The H. W. Johns-Manville Co. has begun a monthly publication, dealing with developments in the packing industry, under the title of "J.-M. Packing Expert."

WATER-GATE VALVES AND FIRE HYDRANTS.—Kennedy Valve Manufacturing Co., Elmira, N. Y. 1910 Catalog. Paper; 9 × 5½ ins.; pp. 30; illustrated.

Several sizes and styles of the Kennedy "Newtype" valve, described in Engineering News, May 12, 1910, are illustrated in this catalog. A description of Kennedy fire hydrants, of the compression type, is illustrated by sectional views.

PIPE UNIONS AND AIR COCKS.—National Tube Co., Hudson Terminal Bldg., New York City. Folder and blotter; paper; 5 × 7½ ins. and 9 × 4 ins.; pp. (folder) 4; both illustrated.

The folder contains questions and answers bringing out the advantages of "Kewanee" unions. The absence of inserted parts is a leading feature of these unions. They are tested for leakage with compressed air at 100 lbs. pressure under water. On the face of the blotter is printed a brief illustrated description of an inverted-plug air cock. The plug is held to its seat with the proper pressure by a spring under its lower end. The lower end of the plug and the spring are protected by a cap screwed into the valve body.

FAN MOTORS.—Westinghouse Electric & Mfg. Co., Pittsburg, Pa. Bulletin 1165 and Folders 4100 and 4101. Paper; 7 × 10 ins.; illustrated.

The line of fans which the Westinghouse Co. is building for the 1910 season is shown in general in the largest of these three publications. The general features of design of both alternating and direct-current machines are shown, and their use is shown in innumerable attractive pictures. The bulletin is filled with tabulated data of performance, etc.

In one of the two smaller bulletins there is condensed information about the direct-current fans, and in the other is a similar presentation of the alternating-current apparatus.

INCANDESCENT ELECTRIC LAMPS.—National Electric Lamp Association, Engineering Department, 4411 Hough Ave., Cleveland, Ohio. Bulletin 7-A. Paper; 6 × 9 ins.; pp. 27; illustrated.

A type of lamp, known as "Mazda," for street-lighting incandescent service is described in this bulletin, with suggestions for the installation of the lamp to secure proper illuminating and artistic effects. The Mazda lamp is one with tungsten filaments and the peculiar name is given it to distinguish the product of certain more or less affiliated manufacturers throughout the country. The development of series, street lighting is touched on and the bulletin also shows a few installations of these lamps and gives curves showing the distribution of illumination.

PIPE COATING.—Standard Asphalt & Rubber Co., Chicago, Ill. Paper; 4 × 9½ ins.; pp. 15; illustrated.

The material for protecting water-supply conduits used at Minneapolis a dozen years or so ago, under the name of mineral rubber coating, and now known as "Sarco" mineral rubber pipe coating, is the subject of this catalog. The manufacturers have made the catalog of particular value and interest by devoting it almost wholly to a description of the 72-in. steel pipe line, 24½ miles in length, recently built in connection with the water supply of the Borough of Brooklyn, New York City. The description is accompanied by the specifications for "Sarco" coating used in this work. It may be added that the pipe-line in question had single-riveted circumferential joints, and that its longitudinal joints were of the lock-bar type. The pipe was made up in 30-ft. lengths by the East Jersey Pipe Co., at Paterson, N. J., and supplied by it to the T. A. Gillespie Co., contractors for the work.

FIRE ALARMS.—Siemens & Halske A. G., American Office, 50 Church St., New York. Paper; 8 × 10½ ins.; pp. 24; illustrated.

The Siemens Fire Alarm System, for medium and small sized cities, is the theme of this bulletin. The first thing described is a push-button alarm in which the sender simply releases a spring clock-work placed within the alarm box. The clock-work rotates a metal disk having a toothed edge, which make a characteristic signal for this station at the central of the system. As an auxiliary, for calling volunteer firemen in their homes or offices, an alternating-current bell-and-ringer system is provided. The steady current flowing through the circuit does not affect the alarm bells and, to ring these, alternating current must first be generated at the central station. This is simply done by a hand magneto. In addition to the house bells, an alarm signal of particularly loud sound is provided for the alternating-current auxiliary system. This is for factories and noisy installations. The ringing of the calling magneto may also be automatically done with the turning in of a fire alarm. All this is described in detail in this bulletin, which shows installations of the apparatus.

STEAM ROAD ROLLERS.—Charles Longenecker & Co., 150 Nassau St., New York City. Paper; 10 × 7⅜ ins.; pp. 32; illustrated.

"New York" road rollers are described in this catalog. The boilers have extra high steam domes which communicate with the steam space, not through a single large opening, but through a number of small perforations in the boiler shell. This is for the purpose of insuring dryer steam for the engine.

A two-cylinder engine is used with a "radial" valve gear. The construction of this gear is not explained further than that only one eccentric is required for each cylinder. Steam jackets on the cylinders are fed by separate pipes from the dome and the jacket condensation is returned to the boiler.

The rollers are driven through a differential gear, gearing for two speeds being provided. The differential gearing is not described. The driving axle, countershaft and engine shaft are directly above each other in the same vertical plane and run in bearings carried by two continuous brackets riveted to the extended side plates of the fire-box.

The "New York" scarifier is described in the later pages of the catalog. It is a sort of heavy-duty harrow for loosening an old road surface in preparation for re-rolling. It is intended to be towed by a steam roller or traction engine.

EXHAUST-STEAM HEATING. — Harrison Safety Boiler Works, Philadelphia, Pa. Paper; 3½ × 6 ins.; pp. 8; illustrated.

A device known as the Cochrane Improved Steam-Stack and Cut-Out Valve Heater and Receiver is described in this little leaflet. This feed-water heater and receiver is distinguished by a large oil separator forming a part of it. It is claimed that by the use of this device there are many economies from savings in a separator and trap, a number of gate valves, elbows, tees, pipes, etc., amounting from $50 to $500 in the different cases, or about 25% of the cost of the device.

"A Problem in Piping and Fifteen Solutions" is the title of a 16-page, 6 × 9-in. pamphlet. The problem was originally published in this company's advertisements in several of the technical papers, and the solutions here presented have been selected from those submitted by readers of the advertisements. The problem is how best to connect up an exhaust steam-heating plant in which there are two exhaust mains, one from the main engine, and one from the pumps, an open feed water heater and receiver, and a riser to the heating system, the piping to be so arranged that the heating system shall at all times receive steam that has been purified of oil, and so that the exhaust of both pumps and engines shall be available for the feed water heater or for the heating system as required. Provision was also to be made for cutting the heater out of service for cleaning or inspection without interrupting the supply of purified exhaust to the heating system. All of the solutions involve the use of an independent separator and trap, together with valves and other fittings, all of which, it is claimed, can better be replaced by the new Cochrane steam-stack and cut-out valve heater and receiver.

For other Proposal Advertisements see pages 51, 52, 53, 54, 56, of Advertisements and Construction News page 244.

PAVING.

OFFICE OF THE CITY CLERK OF THE CITY OF NORWALK, CONN, NO. 44 WALL STREET.

June 2, 1910.

Sealed proposals will be received at this office until 3 o'clock P. M., of Tuesday, June 14th, 1910, for the furnishing of material for and laying a Vitrified Block Pavement in Wall Street, in this city, from River Street to a point near Belden Avenue.

Plans and Specifications can be seen at this office on and after Monday, June 6th, 1910.

The City reserves the right to reject any or all bids.

Approximate quantities:

3,400 sq. yds. of Pavement to lay.
1,200 lin. ft. old Curb to reset.
200 lin. ft. new Curb to furnish and set.
450 sq. yds. of Tar Concrete Walk to repair.

A certified check for $300, made payable to the Treasurer of the City of Norwalk, or cash to that amount must accompany each bid.

All proposals must be sealed and marked proposal and addressed to James J. Keena, City Clerk, No. 44 Wall Street, Norwalk, Conn.

WM. B. BURNELL,
Chairman Street Committee.

PUMPING STATION.

Atlantic City, N. J.

Sealed proposals will be received by the Board of Water Commissioners of Atlantic City, N. J., until 2.30 P. M., June 14th, 1910, for the

ERECTION OF A NEW PUMPING STATION AT ABSECON,

in accordance with Plans and Specifications on file in the office of Howard A. Stout, Architect, Bartlett Bldg., this city.

Each bid must be accompanied by a certified check for Five Thousand ($5,000.00) Dollars, made payable to the Board of Water Commissioners of Atlantic City, N. J., which check will be returned on execution of contract and filing of bond by the successful bidder.

Should the successful bidder fail to execute the Contract and file Bond within 10 days after notification of award his check will be forfeited and the award may be made to any other bidder.

As proper security for the performance of the Contract a Bond acceptable to the Board of fifty per cent. of the Contract price will be required and this amount shall be inserted in the contract. The right is reserved to reject any or all bids.

LOUIS KUEHNLE,
RUFUS BOOYE,
JAMES PARKER,
Commissioners.

L. VAN GILDER,
Engr. and Supt.

PAVING.

Lexington, Ky.

Sealed bids will be received by the undersigned until 12 o'clock noon, Thursday, June 9, for the construction of the following streets with brick, wooden block, bitulithic or asphalt: Short Street, from Limestone to Maxwell Street, 1,486 yards paving, 247 yards concrete, 100 feet concrete, limestone or granite curbing on Limestone Street, Short Street to Maxwell Street; 5,963 yards paving, 915 yards concrete, 370 feet limestone or granite curbing. Certified check of $500 must accompany each bid.

JOHN SKAIN, Mayor.
Lexington, Ky., May 30, 1910.

OFFICE CONSTRUCTING QUARTERMASTER, Fort Sill, Okla., May 27, 1910. —Sealed proposals, in triplicate, will be received at this office until 10 o'clock A. M., June 17, 1910, and then publicly opened, for construction, plumbing, wiring 2 field officers' quarters; 1 two-set officers' quarters; 1 four-set officers' quarters, at Fort Sill, Okla. Specifications, blue-prints and further information furnished on application to the undersigned. Certified check for $5 will be required to insure return of plans, etc. U. S. reserves the right to accept any, or reject all proposals. Proposals should be endorsed "Proposals for Public Buildings" and addressed to CAPT. DAVID L. STONE, U. S. A., Constructing Quartermaster.

BRIDGE.

Nashua, N.

Proposals will be received until P. M. of the 6th day of June, 191 the office of the City Engineer of Nas N. H., for the construction of a r forced concrete bridge over the Me mack River between the City of Nash and the Town of Hudson at the s known as Taylors Falls. (This brid will be 500 feet long with a 30-foot roa way and 6 foot overhanging sidewalk Bidders will state a lump sum for t entire work as provided by these pla and specifications.

Prospective bidders will examine th site and will estimate the quantities o the material required. Each of the bid ders will submit with his proposal a cer tified check in the sum of Ten Thou sand Dollars payable to the Treasurer o the City of Nashua. Upon failure of th contractor to whom the contract i awarded, to enter into contract and t make satisfactory bond within ten day after such award, the check shall be retained and deposited to the credit of the Joint Bridge Committee of the City of Nashua and the Town of Hudson as liquidated damages for such failure.

Each bidder shall file with his bid a sworn statement setting forth the location and span of some similar structure which he has erected elsewhere as a proof of his fitness and experience.

ERWIN O. HATHAWAY,
Clerk of Joint Bridge Committee.

ROAD WORK.

Village of Rye, New York.

Sealed proposals will be received by the Village Clerk until 8.15 P. M., June 8th, 1910, for the improvement of Central Avenue. The work comprises about 1,800 cubic yards rock excavation and 530 cubic yards earth excavation.

Specifications, proposal sheets and plans may be obtained at the office of the Village Clerk.

The right is reserved to reject any and all bids or to waive any defect or informality in any bid should it be to the interest of the Village to do so.

GEORGE L. HENDERSON,
Village Clerk.

Situations Open

WANTED—Several experienced column detailers at once. HINKLE IRON CO., 534 W. 56th St., N. Y. City. 22-1t

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Miscellaneous Wants

WANTED—Contractor and engineer of very wide experience for President and Manager of large Western Contracting Company. Must be prepared to invest very substantial amount, with idea of eventual purchase. Give full experience and amount for investment. Address "F. A. 22," Engineering News, New York. 22-4t

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